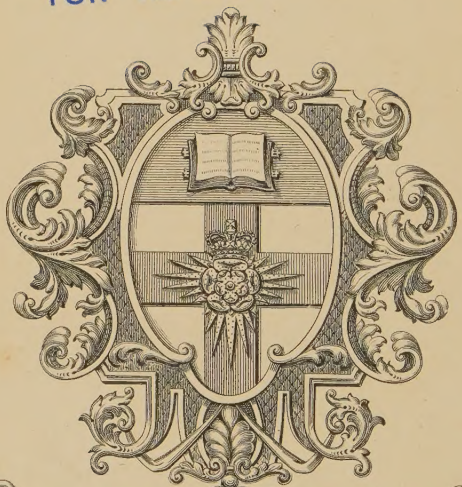
UNIVERSITY OF LONDON LIBRARY

THIS BOOK IS NOT
TO BE PHOTOCOPIED

PARL. PAPERS
FOR REFERENCE ONLY.



University of London

WESTBOOKS, BINDERS, LONDON, N.W.1

[1689] National Education (Ireland)
Comm^rs 19^th Report (1852
Vol 2

REPORTS

FROM

COMMISSIONERS:

SEVENTEEN VOLUMES.

—(4.—Part II.)—

NATIONAL EDUCATION, IRELAND.

Session

4 *November* 1852 —— 20 *August* 1853.

VOL. XLIII.—Part II.

1852-53.

Digitized by the Internet Archive
in 2026

https://archive.org/details/reportsfromcommi0043vari_l8l6

REPORTS FROM COMMISSIONERS:

1852-53.

SEVENTEEN VOLUMES:—CONTENTS OF THE

FOURTH VOLUME.—PART II.

N. B.—*THE* Figures *at the* beginning of the line, *correspond with the* N° *at the foot of each* Report; *and the* Figures *at the* end of the line, *refer to the* MS. Paging *of the Volumes arranged for The House of Commons.*

NATIONAL EDUCATION, IRELAND:

[1689.] NINETEENTH REPORT of the COMMISSIONERS on NATIONAL EDUCATION in *Ireland*, for 1852; with APPENDICES, Vol. II. [APPENDIX G.] - - - - - - - - p. 1

THE

NINETEENTH REPORT

OF THE

COMMISSIONERS

OF

NATIONAL EDUCATION

IN IRELAND,

(FOR THE YEAR 1852.)

WITH APPENDICES.

VOL. II.

Presented to both Houses of Parliament by Command of Her Majesty.

DUBLIN:
PRINTED BY ALEXANDER THOM & SONS, 87, ABBEY-STREET,
FOR HER MAJESTY'S STATIONERY OFFICE.

1853.

[1689]

THE

NINETEENTH REPORT

OF THE

COMMISSIONERS

OF

NATIONAL EDUCATION

IN IRELAND,

(FOR THE YEAR 1852.)

WITH APPENDICES.

VOL. II.

Presented to both Houses of Parliament by Command of Her Majesty.

DUBLIN:
PRINTED BY ALEXANDER THOM & SONS, 87, ABBEY-STREET,
FOR HER MAJESTY'S STATIONERY OFFICE.

1853.

[1689]

CONTENTS

OF THE

NINETEENTH REPORT

OF THE

COMMISSIONERS OF NATIONAL EDUCATION

IN IRELAND.

(1852)

VOL. II.

APPENDIX G.

				Page
I. Reports of District Inspectors on Industrial Schools,				3
No. 1.	Report of	F. W. Newell, Esq.,	on Ballymena Industrial N. School,	3
„ 2.	„	D. L. Blakely, Esq.,	„ Belfast Lancasterian „	4
„ 3.	„	E. A. Conwell, Esq.,	„ Carrickmacross Central „	6
„ 4.	„	E. S. Clarke, Esq., M.D., M.R.I.A.,	„ Thurles „	16
„ 5.	„	J. M'Lochlin, Esq.,	„ Charleville „	17
„ 6.	„	A. O'Callaghan, Esq.,	„ Sligo „	19
„ 7.	„	T. Macnamara, Esq.,	„ Killarney „	22
„ 8.	„	M. Coyle, Esq.,	„ Mallow „	24
„ 9.	„	J. Morell, Esq.,	„ Rahoon „	25
„ 10.	„	Do.,	„ Castlehacket „	27
„ 11.	„	M. Coyle, Esq.,	„ Doneraile „	29
„ 12.	„	J. Doheny, Esq.,	„ Youghal „	30
„ 13.	„	Do.,	„ Fermoy „	31
„ 14.	„	E. S. Clarke, Esq.,	„ Cashel „	32
„ 15.	„	J. Bradford, Esq.,	„ New Ross „	33
„ 16.	„	C. Graham, Esq.,	„ Templeorum „	36
„ 17.	„	M. Lawler, Esq.,	„ Dingle „	37
„ 18.	„	Do.,	„ Milltown „	38
„ 19.	„	Do.,	„ Tralee „	38

APPENDIX G—*continued.*

			Page
No. 20.	Report of H. L. Darcy, Esq.,	on Carlow Industrial N. School,	39
„ 21.	„ J. Doheny, Esq.,	„ Midleton „	40
„ 22.	„ Do.,	„ Tallow „	41
„ 23.	„ S. Adair, Esq.,	„ Millstreet „	42
„ 24.	„ J. M'Sweeny, Esq.,	„ St. Vincent's „	43
„ 25.	„ T. Macnamara, Esq.,	„ Kenmare „	50
„ 26.	„ M. Coyle, Esq.,	„ Kinsale „	55
„ 27.	„ H. P. Clarke, Esq.,	„ The City of Limerick „	56
„ 28.	„ W. MacDermott, Esq.,	„ West Dublin Model „	60
„ 29.	„ Do.,	„ Baggot-street, „	64
„ 30.	„ Do.,	„ St. Peter's (Whitefriar's-st.)	65
„ 31.	„ H. P. Clarke, Esq.,	„ Tipperary „	66

Workhouse Industrial Schools.

„ 1.	„ W. MacDermott, Esq.,	„ South Dublin P. L. Union,	45
„ 2.	„ Do.,	„ Naas „	46
„ 3.	„ Do.,	„ Rathdown „	47

APPENDIX H.

I. HEAD INSPECTORS' REPORTS ON DISTRICT MODEL SCHOOLS:

No. 1. Fourth Annual Report on Clonmel District Model School, by J. W. Kavanagh, Esq., ... 71

„ 2. Third do. on Ballymena do., by Wm. M'Creedy, Esq., . 95

„ 3. First do. on Athy do., by E. Butler, Esq., A.M., T.C.D., . 106

„ 4. Third do. on Dunmanway do., by J. W. Kavanagh, Esq., . 124

„ 5. Third do. on Newry do., by J. Patten, Esq., M.D., M.R.I.A., 140

„ 6. Second do. on Coleraine do., by Wm. M'Creedy, Esq., . 159

„ 7. Fourth do. on Bailieboro' do., by J. Patten, Esq., M.D., M.R.I.A., 172

„ 8. First do. on Galway do., by E. Butler, Esq., A.M., T.C.D., 197

„ 9. Second do. on Trim do., by E. Butler, Esq., A.M., T.C.D., 215

Joint Report upon the Public Examination, for the year 1852, of the Children attending this School, by E. Butler, Esq., A.M., T.C.D., and W. H. Newell, Esq., LL.D., . . . 221

II. REPORT on LECTURES DELIVERED at the CLONMEL District Model School during the year 1852, by E. S. CLARKE, Esq., M.D., M.R.I.A., . 239

Questions proposed by Dr. Clarke, during the year 1852, in the Examination of the Pupils and Pupil Teachers attending this School, on the Elements of Animal Physiology, Human and Comparative Anatomy, and Natural History, ... 244

III. HEAD INSPECTORS' REPORTS UPON SCHOOLS INSPECTED BY THEM DURING THE YEAR 1852:

No. 1. General Report by William M'Creedy, Esq., upon Schools inspected by him during the year 1852, . . . 259

No. 2. Report upon Kyle Park Model Agricultural School, by Edward Butler, Esq., A.M., T.C.D., ... 280

Page

APPENDIX I.

I. Head Inspectors' Reports on Examination of Teachers during the Year 1852*:

No. 1. General Report on Examination of Teachers, Male and Female, held in Districts 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 and 11, in the year 1852, by William M'Creedy, Esq., ... 291

No. 2. General Report on Examination of Teachers, Male and Female, held in Districts 12, 13, 14, 15, 16, 17, 18, 19, 22 and 25, in the year 1852, by James Patten, Esq., M.D., M.R.I.A., . 303

II. Questions (to be Answered in Writing) proposed at the Examinations in the Year 1852:

No. 1. Male Teachers, ... 327

No. 2. Female Teachers, ... 337

APPENDIX K.

I. Report on Agricultural Schools, by Dr. Kirkpatrick, . . 357

II. Appendix to the foregoing:

No. 1. *Statistics of Agricultural Schools.*

No. 1. Tabulated Statistics of Agricultural Schools, . . . 376

No. 2. *Reports on Model Agricultural Schools.*

No. 2. Report on Glasnevin Model Farm, ... 380

„ 3. „ „ „ Gardens, . . . 400

„ 4. „ „ Industrial School, . . . 405

„ 5. „ Ballieborough Model Agricultural School, . 419

„ 6. „ Dunmanway „ . . 425

„ 7. „ Athy „ . . 430

„ 8. „ Glandore Central „ . . 434

„ 9. „ Farrahy „ . . 440

„ 10. „ Tervoe „ . . 446

„ 11. „ Kyle Park „ . . 449

„ 12. „ Derry Castle „ . . 453

„ 13. „ Gormanstown „ . . 456

„ 14. „ Leitrim „ . . 460

„ 15. „ Mount Trenchard Central „ (*with Maps,*) 465

„ 16. „ Woodstock „ . . 469

„ 17. „ Kilwaughter Central „ . . 474

„ 18. „ Larne „ . . 479

„ 19. „ Markethill „ . . 487

„ 20. „ Carrick „ . . 497

„ 21. „ Bath „ . . 501

„ 22. „ Drumhilla „ . . 506

„ 23. „ Loughash „ . . 509

„ 24. „ Sallybank „ . . 514

„ 25. „ Belvoir „ . . 519

„ 26. „ Rahan „ . . 524

* The Tabulated Particulars of these Examinations will be published in the Appendix to the Twentieth Report.

APPENDIX K—*continued.*

			Page
No. 27.	Report on Dromisken Model Agricultural School,	. .	532
„ 28.	„ Ballinakill Central „	. .	537
„ 29.	„ Loughrea „	. .	542
„ 30.	„ Castlehacket „	. .	546
„ 31.	„ Ballycarry „	. .	551

No. 3. Reports on Ordinary Agricultural Schools.

No. 32.	Report on Taniokey Ordinary Agricultural School,	. .	556
„ 33.	„ Lough Ramor „	. .	560
„ 34.	„ Balleighan „	. .	563
„ 35.	„ Ballyoughry „	. .	566
„ 36.	„ Kednaminsha „	. .	571
„ 37.	„ Fivemiletown „	. .	572
„ 38.	„ Dressog „	. .	576
„ 39.	„ Drumnafern „	. .	580
„ 40.	„ Parteen „	. .	583
„ 41.	„ Feakle „	. .	586
„ 42.	„ Cahersherkin „	. .	590
„ 43.	„ Kildinan „	. .	595
„ 44.	„ Gloungarragh „	. .	599
„ 45.	„ Garryhill „	. .	602
„ 46.	„ Twomilehouse „	. .	605
„ 47.	„ Ooning „	. .	607
„ 48.	„ Piltown „	. .	612
„ 49.	„ Kilskyre „	. .	617
„ 50.	„ Ballinvally „	. .	621
„ 51.	„ Clonmellon „	. .	626
„ 52.	„ Mullingar „	. .	629
„ 53.	„ Delgany „	. .	634
„ 54.	„ Balla „	. .	638
„ 55.	„ Cornafulla „	. .	641
„ 56.	„ Geevagh „	. .	647
„ 57.	„ Upper Arigna „	. .	650
„ 58.	„ Killenagh „	. .	654
„ 59.	„ Loughglynn „	. .	657

No. 4. *Reports on Workhouse Agricultural Schools.*

No. 60.	Report on Ballymoney Workhouse Agricultural School,	.	658
„ 61.	„ Ballycastle „	. .	661
„ 62.	„ Larne „	. .	663
„ 63.	„ Banbridge „	. .	667
„ 64.	„ Newtownards „	. .	669
„ 65.	„ Coleraine „	. .	671
„ 66.	„ Clones „	. .	673
„ 67.	„ Castleblayney „	. .	676
„ 68.	„ Monaghan „	. .	679
„ 69.	„ Kilmallock „	. .	682
„ 70.	„ Rathkeale „	. .	686

APPENDIX K—*continued.*

Page

No. 71. Report on Newcastle Workhouse Agricultural School, . 694
„ 72. „ Clonmel „ . . 698
„ 73. „ Carrick-on-Suir „ . . 698
„ 74. „ Enniscorthy „ . . 702
„ 75. „ Glasnevin Auxiliary to North Dublin Union „ . 709
„ 76. „ Dangan „ . . 714
„ 77. „ Lismore „ . . 718

III. ANALYSES OF SOILS OF SOME OF THE MODEL FARMS, . . . 721

IV. CIRCULAR: FORMS OF ANNUAL RETURNS OF STATISTICS OF CROPPING OF AGRICULTURAL SCHOOLS, ... 722

V. PROSPECTUS OF THE MODEL AGRICULTURAL SCHOOLS, . . . 726

VI. DIRECTIONS FOR OBTAINING AID TO ORDINARY AGRICULTURAL SCHOOLS, 728

APPENDIX L.

I. FOUR TABLES, SHOWING THE NUMBER OF VESTED, TO BE VESTED, AND NON-VESTED NATIONAL SCHOOLS, ON 31ST DECEMBER, 1852, . 731

APPENDIX G.

Page

Reports of District Inspectors on Industrial Schools, 3

APPENDIX G.

Reports of District Inspectors on Industrial Schools.

Ballymena.

No. 1.—Report of Francis Wm. Newell, Esq., District Inspector, on the Ballymena Industrial National School.

Ballymena, January 1, 1853.

Gentlemen,—Since my last Report on this institution, an important change has taken place in its arrangements; I allude to the final closing of the Male School.

The attendance having gradually declined for a considerable time, at length fell below the average which the Commissioners regard as sufficient to justify them in retaining Schools in connexion; and the Committee of Management, seeing that no prospect existed of the average increasing, came at length to a resolution to close the Male Department of the Schools altogether.

There can be no doubt that the cause which led to this event is simply the increased prosperity of the town and its vicinity, and the consequent opportunities of obtaining preferable and more profitable employment, which boys can now command here. Those opportunities do not exist to any thing like the same extent for young females; hence it is probable that, for a time, at least, the Female School may continue in operation (especially as the Committee have about £60 in hands to the credit of the institution); but even in the Female School, the average has diminished to some extent.

These Schools would appear to have arisen mainly from the aggravated distress of the humbler classes during the years that followed the disastrous potato blight, and to have constituted an especial provision for an especial want, which no longer appears to exist. That they have not fully succeeded, so as to continue in lasting operation, does not affect the main question of the usefulness and practicability of maintaining ordinary Industrial Schools, from which, while these Schools have had some points of resemblance, they have differed in others that are not less essential.

The land hitherto held by the Committee of Management, and cultivated by the Teacher and Pupils of the Male School, has been given up to the landlord, Sir R. S. Adair, who has agreed to allow the value of their improvements to the Committee: the growing crop was taken at a valuation by the Teacher.

The general arrangements of the Female School have been so frequently and fully set forth, that it appears unnecessary to repeat them here—they continue the same as heretofore,

Appendix G.

Reports of District Inspectors on Industrial Schools.

Ballymena.

and all the details are conducted under the direction of Mrs. Adair and the Ladies' Committee.

I have the honour to be, Gentlemen, your very obedient servant,

Francis W. Newell,
District Inspector of National Schools.

The Secretaries, Office of National Education,
Marlborough-street, Dublin.

Belfast Lancasterian.

No. 2.—Special Report of D. L. Blakely, Esq., District Inspector, on the Belfast Lancasterian Industrial National Schools, County of Antrim.

Belfast, January 4, 1853.

Gentlemen,—In accordance with your instructions, I beg leave to submit, for the information of the Commissioners, the following report on the Belfast Lancasterian Female Industrial National Schools for the year 1852.

On the 1st of January, 1852, the number of pupils on the rolls was 97; the admissions during the year, 67; the removals during the same period, 59; the number on the books on 31st December, 1852, 105; the average daily attendance for the twelve months ended 31st December, 1852, 89; the average age of the children, 9 years.

The classification of the Pupils present on the 31st December was—

Industrial Branches.

Learning to sew and to knit,		79
Engaged in making up plain garments,		9
,, Netting,		5
,, Lace making (Valenciennes),		12
Total,		105

Literary Branches.

Reading in First Book,	26	
,, Second do.,	12	
,, Sequel to Second Book (No. 1),	6	
,, Do. do. do. (No. 2),	8	
,, Third Book,	11	
,, Fourth do.,	16	—79
Writing on Paper,	25	
,, Slates,	20	—45
Arithmetic (first four rules),	34	
,, Compound Rules and Reduction,	2	
,, Proportion,	5	—41
Grammar,	27	—27
Geography,	27	—27

The progress of the children during the year was satisfactory. Great proficiency could not be expected, when it is taken into consideration that the majority of those admitted were in a lamentable state of ignorance, or, for example, of the 67 who entered during the year, 43 were found wholly

unacquainted with even the most simple branches of sewing and knitting, and equally deficient in the literary branches; the others were only a degree better.

Of the removals which took place, 11 arose from bad health; 8 went out to service; 2 to a wareroom; 2 to learn dress-making; 6 to spinning mills; 6 were dismissed; 3 removed to workhouse; 4 died; 4 left from improved circumstances; 1 removed to Scotland; for the remaining 12 no cause was assigned.

To manage the different departments of this School, four Teachers are engaged.

	Salary from National Board.	Salary from Committee.
One to manage the General Industrial Department, ...	£10	£31
One to manage the Valenciennes Lace do.	–	60
One Principal Literary Teacher, .	16	25
One Assistant, ...	–	6

The Superintendent of the General Industrial Department and the principal Literary Teacher are provided with lodgings, fuel, and a specified amount of rations, in addition to the above payments in cash.

The industrial (lace-making excepted) and literary branches are taught in the same apartment, but at different periods of the day, about three hours being devoted to each.

The lace-makers occupy a separate apartment, and devote two hours daily to this branch.

In my previous report, the introduction of lace-making into this establishment was referred to, the Teacher at that time being a native of England, and the manufacture being that known as English cushion-lace. This continued till July, 1852, when a young lady from Belgium was appointed instructor, and the making of Valenciennes lace was substituted for the English. For so far the experiment has succeeded.

The more advanced girls continue to go in turn to the kitchen, where they receive instruction in plain cooking, washing, &c. &c.

Food and clothing are supplied to all the children from the *funds of the house*, the proceeds of their work being very trifling, owing to their extreme ignorance, when admitted, in any kind of work which would be remunerative.

The combining industrial with literary instruction has been carried out in this School from its commencement, and now, after a trial of more than five years, has been found quite practicable and successful.

I have the honour to be, Gentlemen, your most obedient servant,

D. L. Blakely,
District Inspector.

The Secretaries,
Office of National Education, Dublin.

Appendix G.

Reports of District Inspectors on Industrial Schools.

Carrickmacross Central, and its Branch Schools on the Bath Estate, County Monaghan.

No. 3.—Special Report upon the Carrickmacross Central Female Industrial National School, and its Seven Branch Schools on the Bath Estate, County Monaghan, by Eugene A. Conwell, Esq., District Inspector.

January, 1853.

Gentlemen,—I beg to lay before you, for the information of the Commissioners of National Education, my Special Report for the year 1852, upon the Industrial Schools established on the Marquis of Bath's Estate, in the Barony of Farney, County Monaghan, it being now one year since they have been included in my circuit of inspection.

These Schools were established in 1849, under the management and auspices of Tristram Kennedy, Esq., M.P. for the County Louth, and then agent for the Marquis of Bath; and, although they have ceased to be under his management, he nevertheless continues to feel a warm interest in their success and usefulness.

They are now under the immediate management of the present agent of the Bath Estate, William Stuart Trench, Esq., and of Charles Townsend, Esq., Carrickmacross, who are both zealous and vigilant in their superintendence, and very anxious to promote their success.

Among the ladies in the locality who visit these Schools occasionally, and take an interest in their welfare, may be mentioned, Mrs. Evelyn Shirley, Mrs. Trench, Mrs. Morant, Mrs. Barry, the Misses Ryder, Mrs. and the Misses Gibson, and Mrs. Holland.

The Central School, situated in the town of Carrickmacross, is conducted in a house rented for the purpose, the expense of which is borne by the proprietors of the two adjoining estates, viz.:—the Marquis of Bath, and Evelyn J. Shirley, Esq., Lough Fea Castle. This School is exclusively attended by females, and presided over by an excellent and energetic Teacher, Miss Smyth, assisted by a Workmistress in the industrial department, and a Paid Monitress in the literary department. The literary instruction given in the School is necessarily of an elementary character, such as reading, writing, the rudiments of arithmetic, geography, and grammar;—nor could more be expected, as the time devoted to this instruction does not exceed an hour, or an hour and a-half, daily; and every thing considered, the proficiency has been satisfactory. From four to five hours every day are regularly employed by the pupils in industrial training.

At a former period, various descriptions of needlework were carried on; but lacework (*guipure* and *appliqué*) having been found the most remunerative, is now the only kind of work executed either in the Central or Branch Schools. The articles manufactured at the Schools vary with the changes of fashions, and include every variety of lace goods suitable for ladies' dress;—robes, trains, trimmings, collars, lappets, skirts, squares,

flounces, half-shawls, mantillas, sleeves, scarfs, veils, caps, head-dresses, pocket-handkerchiefs, &c.; the time occupied in producing any portion of the work depending on the expertness of the workers, and the regular or irregular application of their time to the employment.

A skilful and diligent worker can earn from 7*s.* to 9*s.* per week; the average earnings to good workers may be reckoned at 5*s.* per week; the average earning of ordinary workers, who have been a year occupied at the employment, varies from 2*s.* 6*d.* to 3*s.* per week, for each.

The first piece of work put in a child's hand is a cap-crown, for which she gets no payment, and generally takes two days to learn on it. She is then presented with a collar, for which she receives, when finished, from six-pence to a shilling. A collar might be called a hard week's work for a beginner; and a child's first collar, according to the general progress, is worth about one-fourth of the amount she will be likely to receive for the sixth collar she works.

Besides her other duties Miss Smyth is obliged to keep a great number of accounts, which I diligently examined so long as the periods of my visits would permit; and I must say that their neatness and accuracy are very creditable to her, and they afford very satisfactory evidence of the good effected by the Schools. From these accounts, I have been enabled to compile the following statistics:—

The highest number on the rolls of the Carrickmacross Central Industrial National School, at any period during the last year was 147. Forty-one were admitted, and fifteen discharged during the year. The daily average attendance *in the School*, was thirty-two.

At first sight the daily average attendance, as well at the Central as the Branch Schools, will appear small; because, by that number, in case of ordinary elementary Schools, we are accustomed to judge of the *extent* of the usefulness of a well-conducted School, in any particular locality. I must, however, observe, that it would not be fair to apply the same test to the Schools under consideration, but rather to bear in mind, that the number expressed by the difference between the daily average attendance in the Schools, and the highest number on rolls may also be fairly reckoned as partaking of the benefits of the Schools. Perhaps more adults attend the Central, than any other School on the estate. Many of these being mothers of families, find it their interest to make good use of every moment; and wisely conclude that the time spent in walking to and from the School might be better employed sitting at their work, at home, during the hours their husbands are at work, and their children, if old enough, at School. They are, however, fairly considered as belonging to the School, for the Teachers must provide them with well-drawn patterns, good material, and be satisfied that they are in good working order, after which there is not much apprehension about the execution. If, however, a worker through stupidity or carelessness

APPENDIX G.

Reports of District Inspectors on Industrial Schools.

Carrickmacross Central, and its Branch Schools on the Bath Estate, County Monaghan.

neglect to present herself at the School for instruction, when doubts or difficulties arise as to the effect the pattern is intended to produce, she meets with a sharp reprimand. Being fully sensible that their *own interest is involved* there is seldom cause to complain.

The financial accounts of these Schools for the year 1852 were not closed till 15th current. The following is an accurate statement of the amount of cash paid for work executed in the Central School :—

	£	s.	d.
1852, January 6,	25	7	1
,, ,, 12,	1	8	8
,, February 14,	17	19	11
,, ,, ,,	5	6	4
,, March 20,	27	12	11
,, May 26,	75	1	8
,, August 10,	57	7	3
,, ,, ,,	1	10	0
,, October 30,	48	1	9
,, December 22,	17	7	2
1853, January 8,	63	10	0
,, ,, 15,	13	16	9
	£354	9	6

BRANCH SCHOOLS.

Each of the Branch Schools consists of a neat stone and lime cottage, slated, ceiled, and boarded, containing one room, lofty, well lighted and ventilated, with a sufficient supply of school furniture and apparatus, besides a vestibule in front, provided with rows of pins, for caps, bonnets, and cloaks ; and surmounted by a handsome cut-stone belfry, with a well-toned bell, which is rung every morning, one hour before the school business commences. The Board having contributed two-thirds to the cost of erection of these Schools, the premises are vested in the Commissioners in their corporate capacity ; and the houses are kept in the best repair, under the inspection of the Board's Clerk of Works. The judicious selection of the sites of these Schools is worthy of remark, as they are all contiguous to the intersections of cross-roads, thus affording easy access to the pupils from every direction ; and the plot of ground attached to each School is securely fenced and walled in, and planted with ornamental shrubs.

DRUMLUSTY NATIONAL SCHOOL.

This School is attended by boys and girls, for whose literary proficiency, a second class trained Master, assisted by a Paid Monitor is responsible. The Workmistress, who receives £8 a-year from the Board, and £4 from the Manager, attends from eleven to three o'clock daily, for the purpose of superintending the industrial instruction.

	Males.	Females.
The highest number on the Rolls at any time during the past year was	79	119
The number admitted during the year was	55	74
The number discharged ,, ,, ,,	23	14
The average daily attendance ,, ,,	25	29

The amount paid for work executed in this School was :—

	£	s.	d.
1852, January 6,	14	5	1
,, February 14,	7	13	4
,, March 18,	25	1	10
,, ,,	2	6	8
,, May 19,	34	6	2
,, August 7,	53	1	1
,, Wages for sales to private individuals,	2	10	0
1853, January 8,	50	19	1
	£190	3	3

Ballymackney National School.

A trained Master, first division of third class, is charged with the literary instruction of both boys and girls. The School fees during the past year amounted to £8 17*s.* 7*d.*

The Workmistress attends four hours daily, for which she is paid £8 per annum by the Board, and £6 by the Manager.

	Males.	Females.
The highest number on the Rolls at any time during the past year was	50	74
The number admitted during the year was	37	53
The number discharged ,, ,,	33	40
The average daily attendance ,, ,,	22	23

The amount paid for work executed in the School was :—

	£	s.	d.
1852, January 6,	9	10	0
,, February 14,	3	14	3
,, March 18,	4	6	7
,, May 19,	19	1	3
,, August 7,	9	19	9
,, Wages for sales to private individuals,	73	11	4
1853, January 10,	19	14	4
	£139	17	6

Blackstaff National School.

The literary department in this School is conducted by a trained Mistress, second division of second class. Amount of School fees during the year, £2 15*s.* 6*d.*

The Workmistress attends from 11 to 3 o'clock, for which she receives £8 from the Board, and £4 from the Manager, yearly.

	Males.	Females.
The highest number on the Rolls at any time during the past year was	46	89
The number admitted during the year was	49	68
The number discharged ,, ,,	36	39
The average daily attendance ,, ,,	14	21

The amount paid for work executed in the School was :—

	£	s.	d.
1852, January 6,	5	9	11
,, February 14,	3	10	0
,, March 18,	18	4	9
,, May 19,	25	2	0
,, August 7,	9	2	0
1853, January 8,	31	17	1
	£93	5	9

Appendix G.

Reports of District Inspectors on Industrial Schools.

Carrickmacross Central, and its Branch Schools on the Bath Estate, County Monaghan.

Kidnaminsha National School.

The Teacher of this School, who is trained and ranked in second division of second class, in addition to the usual branches, gives instruction in agriculture to a class of the more grown boys for one hour daily; for which he receives £5 a year from the Board, and £5 from the Manager in lieu of residence, in addition to his class salary. School fees for the year, about £5.

The Workmistress attends the usual hours, from 11 to 3 o'clock, and receives £8 salary, per annum, from the Board, and £4 from the Manager.

	Males.	Females.
The highest number on the Rolls at any time during the past year was	46	73
The number admitted during the year was	31	54
The number discharged ,, ,, ,,	21	37
The average daily attendance ,, ,,	26	31

The amount paid for work executed in the School was:—

	£	s.	d.
1852, January 6,	1	14	6
,, February 14,	5	3	4
,, March 18,	2	10	8
,, May 19,	11	16	0
,, August 7,	4	7	5
1853, January 8,	16	1	5
	£41	13	4

Broomfield National School.

The efficiency of this School has been much retarded by the frequent changes of literary Teachers during the past year. At present it is conducted by a trained Master, first division of second class. The Workmistress, who has been very attentive to her department, receives £4 a year from the Manager, but no salary has as yet been awarded her by the Board.

	Males.	Females.
The highest number on the Rolls at any time during the past year was	64	85
The number admitted during the year was	58	43
The number discharged, ,, ,, ,,	13	37
The average daily attendance ,, ,,	23	27

The amount paid in wages for work executed in the School was—

	£	s.	d.
1852, January 6,	0	8	9
,, March 18,	0	18	0
,, May 19,	7	10	9
,, August 7,	9	11	3
1853, January 8,	10	8	0
	£28	16	9

Aughnafarcon National School.

The literary instruction is conducted by a trained Master, first division of third class. The School fees for the year

amounted to £8 9*s.* 10*d.* A Workmistress attends from 11 to 3 o'clock daily, for which she receives from the Board £8 yearly, and £4 from the Manager.

	Males.	Females.
The highest number on the Rolls at any time during the past year was	91	48
The number admitted during the year was	77	40
The number discharged ,, ,, ,,	47	26
The average daily attendance ,, ,,	37	19

The amount paid in wages for work executed in the School was—

	£	*s.*	*d.*
1852, January 6,	2	5	0
,, March 18,	0	13	3
,, May 19,	3	8	4
,, August 7,	2	12	0
1853, January 8,	4	13	7
	£13	12	2

Ashburton National School.

A trained Master, first division of third class, is charged with the literary instruction of the boys and girls attending this School. In addition to his class-salary from the Board, the School fees amounted during the year to £4 2*s.* 6*d.* The Workmistress, for her attendance from 11 to 3 o'clock daily, receives from the Board £8 a year, and £4 from the Manager.

	Males.	Females.
The highest number on the Rolls at any time during the past year was	92	56
The number admitted during the year was	63	30
The number struck off ,, ,, ,,	57	31
The average daily attendance ,, ,,	27	17

The amount paid in wages for work executed in the School was—

	£	*s.*	*d.*
1852, January 6,	0	8	0
,, March 18,	0	7	0
,, May 19,	1	1	11
1853, January 8,	4	3	9
	£6	0	8

Mr. Kennedy supplies material for all the work he orders, and, with his permission, the work sold to private parties has been made from material also supplied by him—he being repaid for the material so appropriated, when the articles worked from it have been disposed of; the object being to take advantage of the good material furnished by him, which cannot be procured so advantageously here. Mr. Kennedy's arrangement is, to pay for all work received by him, as soon as he can dedicate time to the purpose, after the work has been delivered.

Much of the success hitherto attained appears to be derived from the untiring energy and great zeal of the Mistress of the Central School. Besides keeping several accounts, answering

correspondents, posting work, and receiving visitors at the School, Miss Smyth's other duties are multifarious. She corresponds with the trade through Mr. Kennedy, and receives all orders and instructions contained therewith for work executed on the estate,—copies extracts from the General Instructions on any essential point, and furnishes a copy of same to each Mistress. She receives material for all work executed at the several Schools; cuts out all work ordered, and keeps an account of the portion issued to each School in a book for that purpose. She must copy, or get copied, all original designs received from the trade, and correct them if defective; arrange others; remodel and appropriate the patterns of one branch to that of the other (*guipure* to *appliqué*, and *vice versâ*), and furnish the Branch Schools with copies of all. About twice a year, she must give a return of stock on hands, raw material, and finished work. When summoned to forward the work to London, she is obliged to write to each Mistress to bring in her work, after which each list is checked, examining the work *seriatim*, returning what is unsaleable, and sending back for repair that which is defective.

All the work being collected from the several Schools, Miss Smyth furnishes Mr. Kennedy with a duplicate of each list, which comes back as a "pay-sheet;" and next follows the most pleasing of all her duties—paying the Schools. This generally occupies four days,—the first three for the Branch Schools, the fourth for the Central School. Each worker is paid in presence of the Workmistress, who, having ascertained that all have been paid, signs the pay-sheet, after which it is countersigned by Miss Smyth, and returned to Mr. Kennedy. Thus, each worker on the Estate is paid through the hands of the Teacher of the Central School; and though the arrangement occupies much time, and entails expense in car-hire upon Miss Smyth, it gives satisfaction to all parties, and secures perfect accuracy, as the Workmistress in each School and the Mistress of the Central School are a check upon each other.

To enlist the entire confidence and co-operation of the Mistresses—upon whom necessarily must largely depend the success or failure, in their respective localities, of this system of industrial education,—Miss Smyth calls a meeting of the Mistresses at the Central School twice a year, that, by a mutual and familiar interchange of opinions, and suggestions, on the *all-absorbing topic*, they may know and co-operate with each other. These meetings are, I conceive, calculated to produce the best results, each deriving instruction from the experience of her fellow-labourers.

As large quantities of patterns are required for the use of the Schools, much valuable time, especially to the Mistresses and best workers, is now saved, which was formerly devoted to tracing or copying patterns with pen and ink, by having the various designs carefully lithographed. To improve native taste, the Government, as an experiment, granted £100 for one

year; out of which sum paper and pencils were provided for the use of the pupils who attended from the several Schools on the Bath and Shirley Estates, and who met in Carrickmacross Market-house, where Mr. MacManus, Head Master of the School of Design, Dublin, made his visits to start and organize a large Drawing Class. Mr. MacManus visited nine times, the pupils, in the intervals, practising drawing, assisted by their Schoolmistresses, to whom Mr. MacManus communicated what he wished them particularly to attend to. On the occasions of his visits, he lectured on Design generally, and afterwards went among the pupils, explaining the method of construction pursued in the Somerset-House drawing-books, a copy being placed before each pupil. The attendance, on some occasions, amounted to 100 individuals, and some member of the Ladies' Committee always attended. The Mistress of the Central School received £10 for taking charge of the drawing materials, books, &c. Mr. Poynter considered that a successful experiment had been made in these Schools, as will be fully apparent from the subjoined extract, which I take the liberty of quoting from Lord Clarendon's address, on the 6th February, 1852, at the Dublin Society's House, where His Excellency attended to distribute, with his own hands, the premiums awarded for industry, taste, and artistic talent in the Dublin School of Design:—

"I will now take the liberty of reading an extract, relative to the School established at Carrickmacross, from the forthcoming Report of Mr. Poynter—a proof-sheet of which was sent to me yesterday. The passage to which I refer, appears to me to be so apposite to the objects for which we are met, that I hope you will excuse me for reading it:—'In connexion with the Dublin School of Design, an inspection has been made of the Drawing Classes in the Female Industrial Schools at Carrickmacross, County Monaghan, to which, on the recommendation of His Excellency the Lord Lieutenant of Ireland, a grant of money and a supply of drawing materials was made in November, 1850, upon an understanding with the Fine Arts Committee of the Royal Dublin Society, to permit such an arrangement of Mr. MacManus's time as would enable him to engage in organizing and superintending them. Mr. MacManus reported his proceedings to this end in a letter to Mr. Deverell, dated the 2nd April, and has given to the superintendence of the classes all the time he could spare from his other duties. Carrickmacross is the centre of a circle of Female Industrial Schools, within a radius of two or three miles. There are eight of these Schools in which drawing classes have been established, viz., Blackstaff, Ballymackney, Drumlusty, Kidnaminsha, Rahans, Shanwherry, and two at Carrickmacross. These contain about 630 Pupils, who are instructed in sewing, in the several branches of embroidering on muslin, and lace, and guipure, the application of cut muslin on Nottingham net; and it was for the improvement of this trade, that the establishment of the drawing classes was desired by the Lord Lieutenant. About 110 of the pupils draw; they practise every day, and use the Government book exclusively. Each School has its own Teacher, but one at Carrickmacross has the general superintendence, and visits the classes alternately. The whole is regulated by a Committee of Ladies. When it is considered that these Teachers are themselves learners, and have to teach in their turn the natives of a remote rural district, the results are such as to produce equal gratification and surprise, and to afford the strongest encouragement to persevere in spreading a knowledge of art in every

Appendix G.

Reports of District Inspectors on Industrial Schools.

Carrickmacross Central, and its Branch Schools on the Bath Estate, County Monaghan.

place where it may be called for, however remotely, or by any means, however humble, which can be made available. With respect to the Teachers, since Mr. MacManus undertook to qualify them as Teachers of Drawing, two of them, seventeen years of age, recommended by their knowledge of drawing, have been taken as Workmistresses to the Presentation Convent at Drogheda, and to the Industrial School at Rathfall. On the occasion of this visit, the productions of the several Schools, both in drawing and work, were brought together to Carrickmacross; and although the variation in their degrees of merit marked a difference in the progress of the Teachers as well as of the pupils, there were amongst them elementary drawings which would not discredit any School of the same standing; and the design and execution of some of the work since the establishment of the School, showed in no less a degree the successful application of the knowledge these girls had acquired. The lace produced in this district finds its way to the London market; and there is the authority of an agent employed in purchasing it, that the guipure in particular has improved in quality, commands a higher price, and affords a better remuneration to the dealer since the establishment of the drawing classes, and he wished to see them further extended as a means of raising this branch of industry to a higher level.' Now, gentlemen, I think the result of this first experiment—and, let me observe, it has been in operation for little more than a year—is very encouraging; and I am glad to take the opportunity of saying, that in any other quarter of Ireland where there is the same desire to promote the welfare of the poorer classes, you may be sure that my exertion shall not be wanting to procure for them the same assistance that has already conferred benefit to so great an extent here."

No doubt, much advantage has been gained—especially by the Mistresses—and the working departments greatly improved in consequence of their connexion with the School of Design; but latterly, I regret to say, Mr. MacManus's visits have been discontinued. During the course of the last year, the Countess of Eglinton patronized these Schools, by appearing at her first Drawing-Room, at Dublin Castle, in Carrickmacross lace; and during the current month, on the very last day I visited the Carrickmacross Central Industrial School, I had the satisfaction of seeing an order, which had arrived that morning, to execute, for Her Majesty's use, a large and handsome piece of guipure lace-work. It is gratifying and significant to know, that the order in question has been forwarded from a London house, in the ordinary course of trade, and that the pattern of the work selected has been designed in this School.

Among the benevolent exertions, having for their object the elevation and amelioration of the condition of a large majority of the poorer classes on this estate, none are likely to prove so beneficial as the establishment of these Schools,—implanting sound moral and religious feelings, and creating and fostering a spirit of industry and independence. The poor, in endeavouring to rescue themselves from physical destitution, have often to contend against strong inducements to moral delinquency: whatever, therefore, goes to counteract such influences, is deserving of public support, for we know by everyday experience, that it is

> "Better build schoolrooms for the boy,
> Than prisons for the man."

Instances have occurred where parties could not pay their rents, or crop their small holdings, unaided by the industrial employment afforded them through the medium of these Schools; and the accounts kept by the Mistress of the Central School with the shops in town, prove that a great portion of the bread they eat, and almost all the clothes they and their families wear, are purchased from the money earned at School by the lace workers. As far as my own judgment goes, aided by the opinions of persons with whom I have conversed on the subject, the humanizing effect produced on the female portion of the community by the extension of *appropriate* remunerative employment, presents a happy contrast to the less profitable, and almost only resource before the introduction of Industrial Schools—*field-work*.

It is true, the description of work now manufactured in the Bath Schools, and so eagerly sought after by ladies of the *first rank* in England, Ireland, Scotland, America, and the Indies, was first introduced, and is still carried on, under the patronage of a benevolent lady, Miss Reed; and subsequently by Mrs. Tottenham, lady of the Rev. Mr. Tottenham, Rector of Donamoyne: but it remained for the Bath Schools to extend the knowledge to all,—to encourage all—to teach all; and not to rest satisfied with a few well-established "hands," but be prepared for every emergency, by having young ones trained to supply the places of those whom circumstances might draw off.

During the past year, £867 18*s.* 11*d.* has been paid to the pupils of these Schools for lacework; and, although the wages in some instances are very moderate, many families are raised from indigence to comparative independence by this source of industry; thus bringing to society a security, and to the cottages and humble dwellings of the poorer classes a higher degree of comfort, than could result from any amount of expenditure in prison discipline—however rigid and apparently curative; or workhouse charity—however abundant and well regulated. The improvement of the country can only be effected, and the prosperity of its inhabitants secured, by raising the physical, industrial, intellectual, and moral standard of the people; and much has been done here during the last four or five years, by the foundation of these Schools, to establish centres from which countless blessings will yet radiate into the general mass of society.

I have the honour to be, Gentlemen, your obedient servant,

Eugène A. Conwell, District Inspector.

The Secretaries, Education Office.

Appendix G.

Reports of District Inspectors on Industrial Schools.

Thurles.

No. 4.—Special Report upon the Thurles Industrial National School, County Tipperary, by Edward S. Clarke, Esq., M.D., District Inspector.

Clonmel, Dec. 31, 1852.

Gentlemen,—Having visited the above industrial establishment, in obedience to your circular of the 13th October last, I have the honour to report as follows :—

This institution was founded at the close of 1847, with a view to the employment and maintenance of females whom the famine of that calamitous year had caused to be dismissed from service. It consists of a small manufactory of textile fabrics, from wool, hemp, and flax. Plain and ornamental needleworks are also executed there.

The sum necessary for its erection (£168) was raised by subscription set on foot by the Very Rev. Dr. Leahy and the nuns of the Presentation Convent of Thurles. The manufactory was established within the convent premises, and is managed by the ladies of that religious establishment.

It consists of three rooms, namely, a spinning room, a weaving room, and a warping room. The weaving room contains three looms, intended for making coarse linen, sacking, or diaper. The spinning room contains 20 wheels for spinning flax, and four for wool, also cards, presses, a sacking frame, and other requisites. The warping room is supplied with suitable winding and warping apparatus. The needlework (both plain and fancy) was, until lately, executed in one of the rooms belonging to the literary department ; but, owing to the manufacture of sacking, coarse linen, or diaper, not having been remunerative of late, the spinning room has been, for some time past, devoted to crochet work, knitting, and general needlework.

The establishment opens in summer at 7 A.M., and closes at 6 P.M. In winter it opens at 8 A.M., and closes at 4 P.M. One hour is allowed for breakfast, half an hour for literary, and half an hour for religious instruction daily.

The Commissioners of National Education contribute ten pounds per annum for the payment of a Teacher or Superintendent.

At the time of my recent visit, the workers were thus engaged :—

At Crochet-work,	12
,, Knitting,	12
,, Embroidery,	3
,, Spinning,	2
,, Sack-making,	1
	30

Number on the rolls, 75. Average attendance, 63.

This institution does not combine literary with industrial instruction to any useful extent; the chief benefit which it confers upon its neighbourhood is the employment of about 63

young women, at an average rate of 1*s.* 6*d.* per week. It is not only *self-supporting*, but yields an annual surplus of from £10 to £30 per year, exclusive of the aid granted by the Commissioners. During the year 1851 (the accounts for 1852 not having been made up at the time of my visit), it yielded a profit of £40, which had been distributed this year, before the visit now reported, in clothes and other charitable donations to the deserving poor of the neighbourhood.

In conclusion, I have to observe, that although I look upon this institution, so far as it extends, as especially valuable in affording employment to the young, under circumstances much more favourable to health and morality than usually attend manufacturing establishments, I, nevertheless, feel bound to express my regret that so very insufficient an amount of time is devoted to literary instruction.

I have the honour to be, Gentlemen, your very humble servant,

E. S. CLARKE.

The Secretaries, Office of Education,
Marlborough-street, Dublin.

Charleville.

No. 5.—SPECIAL REPORT upon CHARLEVILLE FEMALE INDUSTRIAL NATIONAL SCHOOL, County Cork, by JAMES M'LOCHLIN, Esq., District Inspector.

Rathkeale, November, 1852.

GENTLEMEN,—In pursuance to your instructions, I beg to submit, for the information of the Commissioners of National Education in Ireland, the following details of the operation and results of the system of combined industrial and literary education in the Charleville Female National School.

In order to do this, it becomes necessary to render an account of its operations from the commencement, and to exemplify, as briefly as possible, to what extent it has realized the objects for which it was originally designed. With this view, and for the information of those who are unacquainted with its history, as detailed by me in former reports, it may not be amiss to state, that the School was established in the month of February, 1851, with the benevolent intention of conferring upon the female children of the poorer classes of the town and populous neighbourhood of Charleville, the advantages to be derived from a *thorough* education, whilst at the same time it afforded them instruction in embroidery, as a means of industrial resource.

To effect so very desirable an object, two Workmistresses were appointed by the Commissioners to take charge of the industrial department, which they continued to do from its commencement up to the month of August last, at which time they resigned, the children in ordinary attendance having

Charleville.

then acquired such dexterity in the art of embroidery as to be sufficiently competent to proceed without the aid of their valuable instructions. Since this period, the literary and industrial departments of the School have been conducted solely under the superintendence of the "Sisters of Mercy" of the convent at Charleville.

With regard to the literary department, I have already stated its condition in my ordinary report to the Commissioners.

It is much to be regretted, however, that the benevolent intentions of the Commissioners, in reference to the industrial department, should, notwithstanding the unwearied exertions of these ladies, be so far frustrated, as that nearly the whole of the pupils have been forced to abandon the work, in consequence of the miserably low rates paid for it by the Messrs. Wallace and Sons, of Glasgow. Nor, indeed, when we come to inquire into the causes which have led to this result, is it at all extraordinary that such should be the case.

During the period which has elapsed since my recent report upon this School, and which, in consequence of the advanced skill and proficiency of the pupils, may be regarded as being the most favourable to the employers and employed, it appears that to such as were employed at embroidery, the net sum of £19 odd became available, being little more, upon average, to each pupil than 1*s.* monthly. Upon taking a retrospective glance at the progress of the School from its opening in the month of February, 1851, up to the month of August, 1852, being a period of eighteen months, I find, upon reference to the accounts which have been duly kept by the Sisters of Mercy, that the cash forwarded from time to time by the Messrs. Wallace, for the work done, after deducting for deficiency of execution and expenses incidental upon carriage, &c., of parcels, amounted in the whole to the sum of £36 odd, thus leaving to 60 girls who had been in daily average attendance, the sum of 12*s.* each, or 8*d.* per month.

In justice, however, to the parties most interested, I think it right to observe, that during this period some of the pupils received 14*s.*, whilst there were others whose skill and proficiency were of such a medium order as to entitle them to no greater amount than 2*s.* each.

These depressing circumstances, therefore, may account for the School having almost ceased to exist, and, to my mind, are quite sufficient to explain the fact that, upon my visit thither, I found only half a dozen of children engaged at completing a few outstanding samples of embroidery, thus affording matter of surprise that even this number could be induced to expend their time and energies upon so unprofitable a task.

I remain, Gentlemen, your obedient servant,

James M'Lochlin.

The Secretaries, Education Office.

No. 6.—SPECIAL REPORT on the SLIGO FEMALE (No. 2) INDUSTRIAL NATIONAL SCHOOL, and on the subject of Industrial Education generally in District No. 9, by A. O'CALLAGHAN, Esq., District Inspector.

Manorhamilton, January, 1853.

GENTLEMEN,—I beg leave to submit, for the consideration of the Commissioners, this special report, drawn up, in pursuance of your instructions, on the subject of Industrial Schools.

This district (No. 9) is, I regret to state, very deficient in Schools established with the special purpose of imparting to females a knowledge of industrial art. With the exception of the National Schools, in which Workmistresses have been appointed, nothing has been done to secure industrial instruction for the poor of this part of Ireland; and even in the National Schools, the poverty of the people opposes a formidable barrier to progress, rendering them, in the majority of cases, unable to purchase for their children the materials of work, and thus nearly nullifies the advantages which, under more favourable circumstances, the industrial department, managed by a well qualified Mistress, would be likely to confer.

Of the benefits which a National School is capable of rendering in this respect, the Sligo Female School (No. 2) presents a gratifying example. The daily average attendance of this School is about 300, of whom nearly 150 are regularly engaged in learning some description of needlework, which is generally of the useful kinds suited to the ordinary requirements of domestic life; but, very recently, a new branch of work has been attempted, namely, crochet, the materials of which have been supplied by Messrs. Marsland and Co., of Manchester. This industrial department is conducted by the "Sisters of Mercy" of the St. Patrick's Convent, Sligo, who, without the aid of a specially trained Workmistress, most effectively discharge the duties of Teachers. Before the introduction of this new work, the pupils had acquired perfect facility in the use of the needle, and considerable skill in the fitting and making of various sorts of dress, so that the task of initiating them into the new work has been found comparatively easy. Crochet work having been commenced only within the last few weeks, no payments have yet been made; the sisters of the convent, have, however, received assurances that weekly sums of from *5s.* and upwards, depending, of course, on the different degrees of finish in the execution of their pieces, may be earned by the young workers. I have to observe, that, amidst the busy employment of the children in industrial occupation, their mental improvement is by no means neglected; on the contrary, the arrangements of the time table assign a larger portion of time to literary than they permit to industrial instruction. The intellectual acquirements, and the ready answers of the children, place this

APPENDIX G.

Reports of District Inspectors on Industrial Schools.

Sligo.

School in the foremost rank of educational institutions for the poor. I feel a sincere pleasure in the opportunity now afforded of offering my testimony to the judgment, earnestness, and self-sacrificing labours of the benevolent ladies of this convent, to whom the town of Sligo owes the inestimable advantage of possessing an establishment which, for its spacious dimensions, suitable apparatus, and orderly arrangements, deserves to be regarded as one of the Model Schools of this country. This School offers a cheering example of the extent to which an union of literary with industrial occupation may be carried in the same School, and of the good capable of being achieved for the poor by the means provided to effect this very desirable union in most of the National Schools.

There is not in this district, which comprises portions of Sligo, Leitrim, Fermanagh, and Cavan, any School which may, with strict propriety, be denominated an Industrial School—I mean one expressly built for that purpose, and provided with suitable apparatus and machinery, under Teachers regularly trained and exclusively devoted to industrial art—and yet there are scattered in abundance through the district the elements of energy and talent, which, if skilfully combined, would render such an establishment self-supporting. The Agricultural Schools established under the Board, afford encouraging examples of the practicability of giving a really practical industrial training, simultaneously with an ordinary School education. An experiment of a similar character offering, on a large scale, this desirable combination to the female children, would, I think, be attended with favourable results. As an instance, showing the number of persons receiving employment in the various branches of fancy needlework, I may mention the town of Manorhamilton, containing a population of about 1,000, in which there are two Agency-houses, employing over 500 poor people in and around the town; but the advantages of employment are, in a great measure, counteracted by the industrial incapacity of the work-girls, by which the materials given out to them are either totally injured or deprived of much of their marketable value. In the case of the materials thus spoiled by them, the poor people are obliged to pay the original cost; and in the event of the work being properly finished, the emolument is trifling, the average daily wages which may be earned under these unfavourable circumstances of combined poverty and unskilfulness, being about 4*d.* I am, then, justified in stating, that this species of employment cannot be considered remunerative to the people for the time and pains expended on it. It is, indeed, really *injurious*, as it detains the children from the National Schools, and tempts them to forfeit the chances of bettering their condition in after life by means of that which can alone accomplish it for them—*education.* I am aware that time, and an amelioration in the circumstances of the poorer classes, only can supply an effectual remedy against this evil, which threatens, at present,

to leave the young as unlettered and unskilful as their parents; but still, much might, I think, be done to render this employment less detrimental to the education of the people. No inconsiderable amount of good might be attained to by attaching to the National School in each of the principal towns of the district an industrial department in a building devoted exclusively to it, provided with the requisite apparatus, and directed by trained and experienced Workwomen. A plan, securing an harmonious co-operation between the Literary and Industrial Teachers, might easily be arranged. This new apartment should be capable of accommodating at least 100 work-girls; and all engaged in it should be obliged to participate in the instruction provided in the literary department. This plan would be followed by various advantages—the agents of the manufacturers would prefer intrusting their materials to an establishment which could secure to them a large number of expert and skilful hands—little of the original fabrics would be spoiled—and a higher finish of execution would be reached, which would procure more remunerative prices from the employers. But, beyond these pecuniary considerations, a nobler end would be gained, in the combination of this industrial training with moral and intellectual development—a combination which cannot be neglected without the hazard of creating those influences that have tainted the moral atmosphere of mere industrial communities. If the active sympathy of influential families were once engaged in favour of this experiment to benefit the poor, local funds would, I think, be forthcoming to give it a trial; and I am sure that application to the Commissioners for aid in the payment of salaries to the Industrial Teachers would receive a favourable consideration.

Although the observations of this report are engaged, not with the subject of Industrial Schools, properly so called, existing in this district, but with speculations, chiefly of the practicability of, and the happy consequences to be expected from their establishment, they will not, I presume, be considered irrelevant. I thought it to be my duty to call attention to the unsatisfactory circumstances of this district in reference to its means of industrial training—a district which contains the towns of Sligo, Manorhamilton, Ballinamore, Swanlinbar, and Ballyconnell—towns, certainly, not unimportant, but more destitute in provision for imparting to their young people a knowledge of industrial art than many towns of less pretensions in other parts of Ireland.

I have the honour to be, Gentlemen, your obedient servant,

Andrew O'Callaghan.

The Secretaries, Education Office.

APPENDIX G.

Reports of District Inspectors on Industrial Schools.

Killarney.

No. 7.—SPECIAL REPORT on the KILLARNEY FEMALE INDUSTRIAL SCHOOL for the year 1852, by THADDEUS MACNAMARA, Esq., District Inspector.

Killarney, December, 1852.

GENTLEMEN,—The circumstances connected with the formation of an industrial department, in conjunction with the Killarney Female National School, having been amply detailed by my predecessor, Mr. Lawler, I deem it unnecessary to allude to them in the present report.

The little which remains to record, since Mr. Lawler's last report of December, 1851, is, I regret to say, of an unfavourable character, so far as concerns industrial instruction in a pecuniary point of view. It appears the only kind of fancy work introduced was embroidery, material for which was supplied by the Messrs. Wallace, of Glasgow, whose rates of payment were found so extremely unremunerative, that the girls, having for many months continued to practise this difficult art, at length gave it up in disgust. Of the 70 girls who commenced to learn embroidery in March, 1851, not more than three or four continued the operation until September, 1852, when the ladies of the convent, considering it futile to make further effort for its success, dismissed the remaining teacher, who had been sent by the Commissioners in February, 1851, to instruct in embroidery, at a weekly stipend of 8 shillings. Her fellow-teachers had been previously dismissed, so early as October, 1851. A full idea of the unproductive character of the work may be obtained from the small sum realized between March, 1851, and September, 1852, which amounted only to £13.

Plain sewing continues to receive the unremitting attention it deserves, more, however, from its utility as a domestic art, than from the remuneration which results from it, as but a very small portion is paid for. About 200 girls learn this branch, and the time occupied in it continues the same as usual, viz., for two hours daily. Of the amount of money earned during the past year no account has been kept.

To secure the success of an Industrial School, very active management, extensive correspondence, continual inquiry, and great effort to give notoriety are necessary; in a word, the same species of activity and zeal which impart vitality, and give success to a mercantile establishment. From the multitudinous duties which absorb their time and attention, and from the secluded life they lead, it should not be expected that the ladies of the convent could conduct an Industrial School in the spirit alluded to unless they received external co-operation. To the absence of assistance from either a local committee, or from some benevolent influential individual, may be attributed the ill-success of the Killarney Industrial School.

The ladies of the convent, in their anxiety to benefit their pupils, still hope they may be able to revive industrial instruction remuneratively. With this view they have recently

corresponded with a Mr. Higgins, of Dublin, and, from his statement of prices, they consider the girls may be again induced to undertake embroidery. The subject has not, by any means, been lost sight of by the ladies, whose self-sacrificing spirit impels them never to consider their own anxiety and labour, and whose chief difficulty is the want of adequate assistance to enable them to carry out their benevolent intentions. Some attention has been directed recently to this subject by persons of influence in the locality, and I have reason to believe that an effort will be made to establish the industrial department on an effective and permanent basis.

The literary department, which is still superintended by the ladies of the convent exclusively, continues as effective as usual. On the day of my visit there were present 217 girls, whose classification and proficiency may be estimated from the following return:—

Reading First Book of Lessons,	66
,, Second ,,	50
,, Third ,,	68
,, Fourth ,,	33
	217
Learning Geography,	77
,, Grammar,	95
Learning First Four Rules of Arithmetic,	120
,, Commenced, ,, ,,	25
,, Proportion and above,	9
,, To Write on Paper,	97
,, ,, on Slates,	104

The highest number on the rolls for the last twelve months is 486, and the average attendance for the six months previous to the date of my visit, amounted to 232. A minute examination of the several classes in all their subjects of study, elicited, on the whole, a very creditable amount of proficiency and general intelligence. The organization and discipline of the School are in a most effective state. It should be observed, that order, regularity, and all which constitutes good discipline, are here maintained by the respectful influence induced from the spirit of kindness and forbearance which pervades the conduct of the Superintendents of the School in all their relations to their pupils.

It is impossible to over estimate the value of the superior habits formed among the girls, as regards cleanliness, neatness, and thrift, which are calculated to exercise so improving an influence on their domestic habits in after life, and thereby contribute to the diffusion of ideas which may affect, beneficially, the social condition of this portion of the community.

I am, Gentlemen, your obedient servant,

THADDEUS MACNAMARA.

APPENDIX G. No. 8.—SPECIAL REPORT on the MALLOW FEMALE INDUSTRIAL NATIONAL SCHOOL, County Cork, by MICHAEL COYLE, Esq., District Inspector.

Reports of District Inspectors on Industrial Schools.

Mallow.

Cork, December 31, 1852.

GENTLEMEN,—I beg leave to submit the following report on the Mallow Convent Industrial School.

Industrial instruction continues to be given in a suitable and well-furnished room attached to the Literary School-rooms. The nuns are assisted by a Teacher named Elizabeth O'Brien, who is paid exclusively by them, the Board having, on the 20th of November last, withdrawn the grant of 8*s.* a week previously allowed her. This Teacher takes no part in the business of the Literary School. The number of industrial pupils recorded on the Register for this year is 80. There is no separate account kept of the average attendance, because, as they receive literary instruction in the Literary School for an hour each day, they are included in the average of that School. However, as they attend very punctually, it may be safely stated that the average is not less than 70.

The hours of attendance are from 6 o'clock, A.M., to 6, P.M., in summer, and from 10, A.M., to 6, P.M., in winter, deducting the hour spent in literary instruction, and the time allowed for dinner. Besides, some take home work and do it there.

The branches taught are—plain work of every sort; knitting, plain and ornamental; crochet; sewed muslin or embroidery; and netting. Lace work has not been attempted for want of funds. Great proficiency has been attained in these several branches. A satisfactory and gratifying proof of this is afforded by the amount earned by the pupils, who receive from 1*s.* 6*d.* to 3*s.* 9*d.* per week. Their honesty, punctuality, and personal neatness deserve the highest praise. A prospect of earning the smallest sum calls forth the greatest efforts of industry; the hard toil is forgotten when it affords relief to an infirm parent, or prevents an *appeal to the workhouse.* The difficulties of sewed muslin work have been overcome here—the Assistant Teacher learned it from the Teachers sent and paid by the Board; she was for some time paid by the Board. About one-third of the pupils know how to execute it well, and earn from 2*s.* to 3*s.* 6*d.* a week; about two-thirds of them earn from 3*s.* 6*d.* to 3*s.* 9*d.* making *nets*, now so much worn as headdress. Mr. Fitzgibbon, of Cork, supplies the materials, and allows a *liberal remuneration* for the work. Other materials are provided by the nuns themselves, who sell the work to private persons, and traders in Ireland and England, and distribute the profits among the pupils, who are paid weekly in proportion to their work, whether *the latter is sold or not at the time.* Unless this were done, industrial instruction could not be carried on at all.

Parents make efforts to send their children to the *literary* School, in the hope that, after some time, they may be able to earn something, or acquire industrious and useful habits in the

other School; and thus, by a happy combination, the *mind* is *properly directed*, and the hand trained to the useful arts which are the groundwork of national prosperity.

In pursuit of this consummation the ladies of the convent want neither heart, zeal, nor ability.

I remain, Gentlemen, your obedient servant,

Michael Coyle,
Inspector of National Schools.

The Secretaries, Education Office.

Mallow.

No. 9.—Special Report on the Rahoon Female Industrial National School, County Galway, by James Morell, Esq., District Inspector.

Rahoon.

Galway, December, 1852.

Gentlemen,—As directed by your letter of the 13th of October last, I beg to transmit, for the information of the Commissioners, this, my Third Special Report upon the industrial department of the Rahoon National School.

The School-house is situated in the town of Galway, within the grounds of the Presentation Convent, the business of the School being superintended and carried on by the religious ladies of that institution. The house is three stories high, and contains four School-rooms, in one of which the industrial department is chiefly conducted. This room is 61 by 23 feet, and 13 feet high; it is sufficiently lighted and ventilated, and in all other respects well adapted for School purposes.

On the 20th of November last, the Commissioners came to the determination of withdrawing the Board's salary from the three Teachers employed in this School; and, owing to the want of adequate funds, the nuns were under the necessity of dispensing with the services of these Teachers, who, I feel it my duty to observe, by diligent attention to their business, during the term of their engagement, had done much to advance the learners under their care, and, by the superior execution of the work, raised considerably the already well-established character of this institution as a School of Industry.

The annexed return exhibits the classification of the girls in attendance in the industrial department on the day of my visit. The accounts of the attendance of the industrial pupils are not kept distinct from the general accounts of the School, I cannot, therefore, give either the daily average attendance or number on the rolls.

Those present were learning the following branches:—

Embroidery,	80
Plain Sewing and Cutting-out,	40
Washing and Making-up Linen, Cleaning Furniture, &c.,	10
Total,	130

APPENDIX G.

Reports of District Inspectors on Industrial Schools.

Rahoon.

In this number are included 30 girls, who attend in the other School, and whose education is directed by Teachers distinct from those in the main industrial apartment. It is the wish and general practice of the Managers of this Institution that all the girls employed at industrial work should receive literary instruction for a short time daily; and, on examination, I found that many of the more grown girls, who, upon entering the School, were utterly ignorant of the very elements of learning, can now read pretty well, and some few can write legibly, and calculate on slates.

Three hours on each of the first four days of the week are devoted to industrial work, which is so regulated as not to interfere with the efficient working of the literary department.

The material for embroidery is procured from a commercial house in Dublin, in parcels of various sizes; when worked, the goods are returned to the proprietor, and the prices annexed to each piece are paid to the institution; but, should the goods be retained beyond the time specified by the employer, or the style and finish of the work not satisfy his views, a portion of the sum originally agreed on will be deducted; and this circumstance, considered with the low remuneration afforded, must, of course, damp the ardour of the children, and raise in the minds of all serious doubts whether success proportionate to the amount of labour expended, can, under such unfavourable circumstances, be reasonably expected. It is true that, in the establishment of this School, the chief end the promoters have in view is not remuneration of a pecuniary kind—the main object sought is to *train the children to habits of industry*, so as to fit them for the business of after life; but it is almost needless to observe, that the most effective steps to promote such an object are materially impeded by the practical and telling proof daily before the mind of the learner, that adequate pecuniary remuneration is not afforded for the time and labour expended, and *such* remuneration is the only criterion by which the young mind will naturally judge of the value of industrial habits. Yet, notwithstanding this difficulty, it is a subject of great and pressing interest that, in female education, *industrial instruction* should form a prominent feature, and this instruction should, if possible, be such as would secure to the worker a ready pecuniary remuneration; but it ought, certainly, to be of a kind *suited to the probable duties of the after life of the learner*. Hence I am of opinion that plain work—such as knitting, darning, mending, cutting-out and making-up of dresses—is better suited than any species of fancy work for the majority of the children attending the National Schools in this country.

As regular accounts of the profits and expenditure of the School are not kept, the earnings of the pupils cannot be exactly known. They are, however, undoubtedly, very low, averaging not more than 1*s.* per week. The amount thus obtained is expended in procuring food and clothing for the poor children of the School. I believe the parents of the

children fully appreciate the advantages the pupils are deriving from their attendance on industrial instruction. They, and the community in general, are deeply indebted to the ladies of this excellent institution, who are doing so much for the poor and friendless of this town.

I have the honour to be, Gentlemen, your obedient servant, *Rahoon.*

James Morell,
Sub-Inspector of National Schools.

The Secretaries, Education Office.

No. 10.—Special Report on the Castlehacket Female Industrial National School, County Galway, by James Morell, Esq., District Inspector. *Castlehacket.*

Galway, December, 1852.

Gentlemen,—In accordance with the directions conveyed in your letter of the 13th of October, I beg to forward a Special Report upon the Castlehacket Female Industrial School.

The house is situated in the neighbourhood of the town of Tuam, on the property of Denis Kirwan, Esq., the Manager of the School. The literary and industrial departments are carried on in the same room, which is 18 feet by 18, and 9 feet high; it is sufficiently lighted and ventilated, and supplied with all requisite furniture.

The same Teacher, Harriet Reilly, aged 44 years, conducts both departments. She receives from the Board of Education £13 per annum. The Manager allows her £6 per annum, with a dwelling-house rent free.

The raw material is procured by the Manager, and when worked by the children is disposed of chiefly by private sale. When possible, orders for work to be done are obtained, by which a more speedy remuneration is afforded, and the risk that the want of a ready market would create is avoided.

The annexed Table exhibits the classification of the children, as presented by the School on the day of my visit.

Those present were learning the following branches :—

Fancy Knitting,	11
Shirtmaking,	11
Plain Work of various kinds,	42
Total,	64

As all the children of the School receive industrial instruction, the above total, 64, gives the number in attendance on the day of inspection. The highest number on the rolls for the last six months was 71; the average daily attendance for the same period being 41.

Appendix G.

Reports of District Inspectors on Industrial Schools.

Castlehacket.

The School opens with literary instruction each day at 10 o'clock, and the business of this department continues till 2 o'clock; industrial instruction then commences, and closes at 4 o'clock. Both branches, under the careful supervision of the Manager's lady, are conducted with full efficiency, and the School generally is worked with smoothness and harmony. It is thus seen that literary and industrial instruction, by judicious management, can be carried on in the same room without injury to either department.

The following statement exhibits the income and expenditure of the School for the past twelve months :—

	£	s.	d.
Received for 212 pair of Stockings, from 5*d.* to 1*s.* 6*d.* per pair, ...	12	12	4
,, 125 pair of Mittens, from 9*d.* to 1*s.* per pair.	5	9	2
,, other works of various kinds, .	1	11	10
	£19	13	4
By cost of material, ...	6	8	8
Balance in favour of School, . .	£13	4	8

By comparing this statement of the accounts with that furnished in last year's Report, it will be seen that the School is in a progressive state. The accounts, which are correctly kept, are closed at the end of each year; and the profits of the School are given to the children, in sums proportionate to their respective earnings. The parents of the children, I have learned, watch with interest the progress of the industrial department, looking to it as an efficient means towards promoting the after welfare of the pupils.

The main object the promoters of this School have in view is, to inculcate and show the value of business habits—to create and develop in the youthful minds under their care, a desire and respect for self-dependence, which must influence happily the conduct and character of the pupils in after life. Such a system of instruction should, in my opinion, be extended to all Female Schools under the charge of Teachers qualified to impart such instruction, and superintended by Managers acquainted with the working of Industrial Institutions, and prepared to use every exertion to procure a ready and profitable market for the worked goods of the School.

I have the honour to be, Gentlemen, your obedient servant,

James Morell.

The Secretaries, Education Office.

No. 11.—Special Report on the Doneraile Female Industrial National School, County Cork, by Michael Coyle, Esq., District Inspector, District 44.

Cork, December 31, 1852.

Gentlemen,—I beg leave to submit the following Report on the Doneraile Convent Industrial School.

The number of industrial pupils on the register at the present date is 179 ; there is no separate account of the average, all being included in the average attendance of the literary School, because all receive literary instruction. Of those on the register, fifty are able to work embroidery or *sewed muslin*, which they had learned from the Teacher paid by the Board, previous to her withdrawal in August last, when the term of her temporary appointment had expired. This is a very satisfactory result of the experiment made by the Board to introduce a knowledge of a branch, the introduction of which is, at first, beset with such difficulty. Sixty can do plain work remarkably well—shirts, plain and with ornamented fronts, are made of various patterns ; knitting, plain and ornamental, is executed with great taste—nearly all the pupils being proficient in these two branches. Sixty have learned crochet and guipure lace-work ; and nine can work admirably a curious kind of artificial flower-work, called "feather flowering," from the fact that *feathers* are almost the only material used.

Until lately, the industrial instruction was given in the literary School-rooms, without, however, interfering with the literary business ; but recently an additional room has been built, and is now appropriated exclusively for the industrial department. It is 22 by 22 feet, and 11 feet high, well lighted and ventilated, and provided with a pretty fair supply of suitable furniture ; the nuns are about procuring some additional tables and desks, as they intend to have *all the work* done in this room, and to give in the literary School only as much industrial instruction as may qualify the pupils for admission into the Industrial School. The nuns have no Teacher to assist them in either department ; but they employ and pay a few of the most deserving pupils, who act as Monitresses. They provide, as well as they can, from their *limited funds* all the materials for the different branches, and distribute amongst the pupils all the *profits*. Mr. MacDonnell, of Glasgow, through his agent, Mr. Richie, of Dublin, now purchases the sewed muslin work, for which he allows a fairly remunerative price ; and, in other respects, Mr. Richie assists them in their efforts to improve the social condition of these poor pupils, and keep them from the workhouse. The excellence of the work has not only found it a market in several parts of Ireland and England, but even in Boston and other parts of America. I am sure their sales would be greatly extended if their successful efforts in forwarding industrial education were better known. The "*feather-flowering*," an admirable imita-

Appendix G.

Reports of District Inspectors on Industrial Schools.

Doneraile.

tion of nature, exhibiting every variety of colours, has been much sought for by ladies in England, and brought a high price—private persons giving more, of course, than traders—but no excess over the intrinsic value being ever asked.

Some counterpanes of great beauty have been wrought in *silk patch-work*, and brought very high prices. One was sold in Philadelphia for £50 9*s.*, which was given to the workers, some of whom were thereby enabled to *emigrate.*

Most of the workers earn 2*s.* 6*d.* a week; beginners earn about 1*s.* a week, which proportionably increases as they advance in a knowledge of the art. The amount that might be paid in all cases would be much higher, if the nuns had more funds at their command; but the extent of good done by their efforts to society is not to be measured by these payments, such as they are: habits of order, cleanliness, tidiness, *self-respect*, and *self-reliance*, form priceless items in the account.

Many pupils have obtained situations as teachers and servants, and their conduct and services have earned the approbation of their employers, both in Ireland and England. Those who emigrated, have, by frequent remittances, mitigated the hardships of the parents, or other relatives, whom they left behind in poverty.

The Board granted no assistance towards the support of the industrial department, except that they sent and paid the Teacher of *sewed muslin*, who was withdrawn.

I beg leave, respectfully, to recommend them to grant *liberal aid* to this fine institution, in every respect worthy of their approval; for otherwise, the public benefit it is capable of diffusing will be lamentably diminished.

I remain, Gentlemen, your obedient servant,

Michael Coyle,
Inspector of National Schools.

The Secretaries, Education Office.

Youghal.

No. 12.—Special Report on the Youghal Female Industrial National School, County Cork, by James Doheney, Esq., District Inspector.

Lismore, December, 1852.

Gentlemen,—I visited the Youghal Female Industrial National School on the 9th instant. I ascertained that about 100 of the poorer girls work all day, except from 10 to 11 o'clock, when one division, and from 12 to 1 when the other division, receives literary instruction. Nearly as many others work only from 12 till 2, and attend the literary classes during the other school-hours.

Youghal.

One of the nuns is Head Mistress of the industrial department, and devotes her whole care to it. She is assisted by six other nuns, who also occasionally give literary instruction. The dimensions of the present work-room are 33 by 21 by 14 feet, which is very well furnished.

Embroidery of various kinds, netting, knitting, and plain needlework are well executed; artificial flowers are also made.

The religious ladies sell the work to such customers as they can procure, and, from a fund which they have set apart from their own resources for the promotion of industrial education, frequently pay for the work in advance.

I have the honour to be, Gentlemen, your obedient, humble servant,

James Doheney,
District Inspector.

The Secretaries,
Education Office, Dublin.

Fermoy.

No. 13.—Special Report on the Fermoy Female Industrial National School, County Cork, by James Doheney, Esq., District Inspector.

Lismore, December, 1852.

Gentlemen,—When I visited the Fermoy Female National School on the 20th September, last, the numbers were as follows:—present, 252; highest on books for previous six months, 627; daily average attendance for same period, 258.

I visited again on the 10th November last, to report on the *industrial* department, when I learned that of the above numbers, 60, giving a daily average attendance of 30, work from 6 till 9, A.M., and from 11½ till 6, P.M.—being taught reading, spelling, writing, and arithmetic from 10 till 11½, A.M. All the rest of the pupils work only from 11½ till 1 daily, and attend literary instruction during the other school-hours. One end of the lower school-room is set apart for those who are more constantly at work; the others do their work at the time appointed in the school-rooms.

The work done is principally embroidery of printed pieces of muslin, supplied by Mr. Higgins of 14, Merchant's-quay, Dublin; and embroidery on muslin and cambric, supplied by the ladies of the convent. Also, crochet work and knitting in great variety, including polka jackets, caps, collars, &c. At the knitting and crochet work, the best workers can earn from 3*s.* to 4*s.* per week; at the work supplied by Mr. Higgins, they earn from 6*d.* to 2*s.* per week. Without this employment, the 30 girls who work more constantly could not support themselves, nor attend the School.

APPENDIX G.

Reports of District Inspectors on Industrial Schools.

Two of the religious ladies direct and superintend the work, assisted by a monitor, paid by the Commissioners of Education £4 a-year for the purpose. The accounts for the receipts and disbursements for the current year are not yet made out.

I have the honour to be, Gentlemen, your obedient servant,

Fermoy.

JAMES DOHENEY,
District Inspector.

The Secretaries,
Education Office, Dublin.

Cashel.

No. 14.—SPECIAL REPORT on the CASHEL FEMALE INDUSTRIAL NATIONAL SCHOOL, County Tipperary, by EDWARD S. CLARKE, ESQ., M.D., District Inspector.

Clonmel, December 31, 1852.

GENTLEMEN,—In obedience to your instructions, I have the honour to submit the following report upon the industrial department of the Cashel Female National School.

I find that this institution had the benefit of an experienced teacher of embroidery, recommended by Messrs. Wallace, of Glasgow, and paid by the Board of Education, at the rate of 8*s.* per week, from 1st September, 1851, to 20th November, 1852. Such class rolls have not been kept as would show the daily attendance of the pupils engaged at industrial occupation. I am, however, aware that the average attendance of pupils at the literary department of this School during the past year was 175, and of these every one old enough to sew received industrial instruction in embroidery for two hours each day from the paid teacher; and in crochet work, plain sewing, and plain and ornamental knitting and netting, from the religious ladies who patronize and conduct this institution.

I have also ascertained that about 40 girls were engaged in embroidery throughout the past year. 16 in plain needlework, and 30 in plain and ornamental knitting and netting, or crochet work.

Since the removal of the Teacher, about 30 pupils continue to practise embroidery, orders for the work having been obtained from several ladies; but scarcely any work is now doing for Messrs. Wallace, owing to the very low rate of wages paid by these merchants.

Twenty-five out of the thirty pupils alluded to, as continuing the practice of embroidery, are able to earn 3*s.* per week.

Twelve of the pupils instructed in crochet work by the religious ladies who conduct this School, are also able to earn 3*s.* per week each, when employed on the finest description of this work; and on the averages of the past six months, *have* earned 1*s.* 6*d.* per week. And it is to be hoped, that under the improving aspect of this country, sufficient employment

will soon constantly arise at the higher rate of earning alluded to.

Fifty other pupils (who are at present mere beginners in this art) now earn about 9*d.* per week; but, before the lapse of another year, they also will be able to earn 3*s.* weekly, if sufficient demand for this work continue.

Cashel.

On the whole, it is clear that the experiment of introducing ornamental needlework as a branch of industrial instruction, has, even in a pecuniary point of view, been attended with a fair share of success; and, whilst the assertion contained in my last report upon this School, as to the inability of this work to maintain the existence of the workers at the low rate of remuneration afforded by some of the Glasgow merchants, has been verified, and their work refused, my anticipation that remunerative rates of wages would be hereafter obtained, in proportion to the improving condition of this country, and demand for articles of luxury thence resulting, has been fully realized; and the still greater benefit arising from habits of closely continued industry, is still more important.

I have the honour to be, Gentlemen, your most obedient servant,

EDWARD S. CLARKE.

The Secretaries, Office of Education,
Marlborough-street, Dublin.

No. 15.—SPECIAL REPORT on the NEW ROSS FEMALE INDUSTRIAL NATIONAL SCHOOL, County Wexford, by JOHN BRADFORD, Esq., District Inspector.

New Ross.

March 22, 1853.

GENTLEMEN,—In compliance with the instructions contained in your letter of the 18th instant, I visited the New Ross Industrial School to-day, and beg to forward this Special Report as the result of my inquiries.

The School is under the management of nuns of the Carmelite Order, and is held in the same building as the New Ross Female National School, which is attached to the New Ross Convent.

The school-rooms are three in number. The upper is thirty feet long by thirteen and a-half broad; each of the lower rooms is fourteen three-fourths long by thirteen and a-half broad. The three are lofty, well lighted and ventilated, and suitably fitted up with seats, tables, and presses. They were built and furnished by local subscriptions. The upper room is kept for the use of the most advanced workers.

In November, 1851, the Board sent Mary M'Gratty here as Workmistress. She went away in February, 1852, and in her place Bridget Byrne (aged seventeen) was appointed, at the recommendation of the Managers. She is still the Teacher.

APPENDIX G.

Reports of District Inspectors on Industrial Schools.

New Ross.

Her sole employment is attending these work-rooms. She has nothing to do with the literary department. Up to last November the Board paid her a salary of eight shillings a week, which was then withdrawn, as no Industrial School receives that aid for a longer period than twelve months; since that time her only remuneration is the sum she earns by her work, and that does not exceed six shillings a week.

The number of pupils enrolled in 1852 was 170, but the greatest attendance any day was 120. The average for the year was 90.

These numbers are not given as strictly accurate, for no regular account was kept during the year.

Occasionally three or four have done something at lace-work; with this exception, the girls are solely employed in embroidering on muslin.

The School is held every week-day (Saturday excepted) from 10 to 3 o'clock, for the grown girls, about sixty in number, who attend merely for work. The others, who attend the literary department, come at 12 and leave at 2 o'clock, except those who are learning grammar and geography, and cannot give more than an hour each day to work.

The number at present is unusually small, from the severity of the weather. There were only 67 in the literary department to-day. Of these 33 attended in the industrial department, with 46 grown females, who came solely for work; making a total of 79 working in the Industrial School to-day.

All the pupils bring the work home. Many of the older females never come here after they have learned the work, except when they want materials.

Of the 33 girls from the literary department—

1	was	7 years of age.
3	were	9 ,,
6	,,	10 ,,
7	,,	11 ,,
1	was	12 ,,
10	were	13 ,,
3	,,	14 ,,
2	,,	15 ,,

Eleven of these were only beginners, and earned nothing. Of the remaining 23—9 earn 5*d.* per week, 14 earn 1*s.*; but they work only four hours a-day.

Of the 46 who came merely for work—

		s.	*d.*	
13	earn	0	6	a week.
3	,,	0	8	,,
5	,,	1	0	,,
5	,,	1	6	,,
5	,,	2	0	,,
2	,,	2	6	,,
3	,,	3	0	,,
10	,,	4	6	,,

New Ross.

For these sums they must give up twelve hours a-day for six days—a total of seventy-two hours a week.

Of those absent to-day, and those who work at home, none earn more than 3*s.* a week.

A girl of ordinary capacity can learn this work in three months.

I inquired the ages of these 46 girls, and found that—

2	were	13	years old.
10	,,	14	,,
11	,,	15	,,
10	,,	16	,,
7	,,	17	,,
2	,,	18	,,
3	,,	19	,,
1	was	25	,,

Some of the absent are married, and have families: one is forty years of age.

The Managers are the medium between the pupils and the employer, Mr. Higgins, of 14 Merchants'-quay, Dublin, who supplies the materials, and, I understood, pays the cost of carriage.

When each piece is finished, the Managers pay for it at the settled price, and once a fortnight they collect the work in parcels and send it to Mr. Higgins, who remits the money immediately. He acts not only in the fairest, but even in the most liberal manner on every occasion, frequently making advances for work not yet completed.

Since February, 1852, he has been the only person for whom these girls work. Orders from others have been declined, as the prices they proposed were found to be totally inadequate.

As the Managers pay the girls on receipt of their work, they have no necessity to keep any accounts of money except those with Mr. Higgins.

In the course of 1852 the payments received from him amounted to £120, which went to the workers without any deduction.

The establishment of the Industrial School does not appear to have produced any effect on the attendance of the Literary School.

Attendance in the Literary School is not made a necessary condition for admission to the industrial department.

As the literary department has not been injured by the industrial, and as so many girls are earning more here than they could by any other means accessible to them, I think this School is calculated to be useful, at least so long as this kind of work is in demand, and the present prices are given.

I am, Gentlemen, your obedient servant,

JOHN BRADFORD.

The Secretaries, &c. &c.

Appendix G.

Reports of District Inspectors on Industrial Schools.

Templeorum.

No. 16.—Special Report on the Templeorum Industrial National School, for the year ended December 31, 1852, by C. Graham, Esq., District Inspector.

Waterford, January 3, 1853.

Gentlemen,—In compliance with the instructions contained in your letter of 13th October last, I visited the Templeorum Industrial School on the 10th ultimo, and now beg to forward this, my second Report upon it.

Since my last Report, the School has been placed upon a more efficient footing. The industrial department being now carried on in a room apart from the Literary School, and under the charge of a competent person (Miss Johanna Morrissy), who receives a yearly stipend of £8 from the Commissioners, and £2 from the Earl of Bessborough, besides 1*d.* per week from all those pupils who are over 15 years of age.

The literary and industrial departments are so arranged, that while the *children* of the former retire to the work-room for one hour daily, the *grown girls*, who formerly attended solely to the industrial instruction, now go up to the School-room to receive literary instruction during the continuance of the children in the work-room.

The description of work done continues the same as described in my former Report, viz.:—Embroidery, guipure, imitation Brussels lace, all kinds of fancy work, and also a fair share of plain work.

So improved is the work, that the demand for it exceeds the supply, while most remunerative prices are paid for it by ladies in all parts of the kingdom, some having even been sent to Paris.

I regret not being able to state the amount paid for work to the pupils attending this School. The accounts kept by the Manager having reference merely to the amount paid generally to all those on the Bessborough Estate who were paid for their needlework during the year. However, I hope, in my next Report, to be able to supply this defect.

The number at present on the rolls of the Literary School amounts to 140, with an average attendance of 67 for the year.

Of those 140 girls, 52 are entered on the rolls of the Industrial School, and, together with 11 who are over 15 years of age, form the "Industrial Class."

All are required to pay 1*d.* per week School fees. The fees of those under 15 years of age go to the literary department.

Of the Industrial Class—

3	are under	10	years of age.
49	,,	15	,,
5	,,	20	,,
5	,,	25	,,
1	,,	30	,,

At the public examination held in this School in October

last, the general appearance of the children caused great satisfaction to the visitors, especially when it was known that, besides clothing themselves, and paying for their education out of the proceeds of their own industry, several were able to provide many little necessaries for their homes and families.

I am, Gentlemen, your obedient servant,

C. Graham,
District Inspector.

The Secretaries, Education Office.

No. 17.—Special Report on the Dingle Female Industrial National School, County Kerry, by Michael Lawler, Esq., District Inspector. *Dingle.*

Tralee, January 3, 1853.

Gentlemen,—The following are the facts which I have ascertained respecting the industrial department of the Dingle Female National School, for the year ended December 31, 1852.

There are 240 girls engaged at embroidery, 30 of whom earn at the rate of 2*s.* 6*d.* per week each; 100, 1*s.* 6*d.* per week; 110, 6*d.* to 1*s.* per week.

Mr. Higgins supplies the materials, and pays for the work at much more remunerative prices than the Messrs. Wallace were accustomed to give.

At plain work, the best workers earn 1*s.* per week; there are 30 girls engaged at it.

All the workers (except 30 who are exclusively engaged at work) receive literary instruction daily from the nuns, and are occupied at work from 12 o'clock until 2¼ each day.

There are two beautiful work-rooms, very conveniently and elegantly fitted up for the purpose.

	£	*s.*	*d.*
Amount of sales of Work, for Cash, from January to December, 1852, ...	75	5	0
Ditto, on Credit, . .	8	6	8
Value of Work on hands, ...	30	0	0
,, of ditto sent to England, not yet paid for, ...	10	0	0
Total, .	£123	11	8

I remain, Gentlemen, your obedient servant,

Michael Lawler,
District Inspector of National Schools.

The Secretaries,
Education Office, Dublin.

Appendix G.

Reports of District Inspectors on Industrial Schools.

Milltown.

No. 18.—Special Report on the Milltown Female Industrial National School, County Kerry, by Michael Lawler, Esq., District Inspector.

Tralee, January 3, 1853.

Gentlemen,—I have ascertained the following facts respecting the working of the industrial department of the Milltown Female National School during the year ended December 31, 1852.

The branches taught are, plain and fancy needlework, embroidery, tapestry, crochet and Berlin work, netting, and knitting.

The time for work is from 10 to 11, and from 2 to 4 each day. There are 200 girls engaged at it.

The literary and moral instruction of all the girls engaged at work is carefully attended to by the nuns.

There are between forty and fifty girls engaged at embroidery, the greater number of whom have made good progress; but the pieces sent by the gentlemen who furnish the School with materials are so long and tedious, particularly the "insertion" pieces, that no one girl has patience to go through the twentieth part of one of them. The consequence is, that the same piece passes through several hands before it is finished; and no girl feeling herself particularly responsible for the goodness or neatness of the work, it seldom gives satisfaction. The prices, too, at which the pieces are marked, are so low, that none of the grown girls can be induced to continue at the work.

Some of the girls, besides attending to their literary instruction, earn at plain work about 2*s.* per week.

I remain, Gentlemen, your obedient servant,

Michael Lawler,
District Inspector.

The Secretaries,
Education Office, Dublin.

Tralee.

No. 19.—Special Report on the Tralee Female Industrial National School, County Kerry, by Michael Lawler, Esq., District Inspector.

Tralee, January 3, 1853.

Gentlemen,—I beg to submit the following Report on the industrial department of the Tralee Female National School, for the year ended December 31, 1852.

In this School, industrial instruction is given daily, in summer, from 6 to 9 A.M., from $11\frac{3}{4}$ to 1, and from 2 to 6 P.M.

The branches taught are, plain and fancy needlework,

knitting, netting, crochet, Berlin work, tufted and flat, and staymaking.

The first-class pupils earn from 2*s.* 6*d.* to 3*s.* per week; the second-class, from 6*d.* to 1*s.*; the third-class, from 6*d.* to 10*d.*

During the past year, the payments to the pupils for plain and fancy work amounted to £35; for knitting, netting, and crochet work, to £15.

Tralee.

At the time of my former Report, there were a few grown girls and women, who were exclusively engaged at work; but at present all the workers receive literary instruction.

The work is chiefly furnished by the gentry of Tralee.

Embroidery was taught from the 14th October, 1851, to the 24th April, 1852, when it was discontinued; the prices given for the work by the Messrs. Wallace being so low as to prove quite unremunerative.

I remain, Gentlemen, your obedient servant,

Michael Lawler,
District Inspector.

The Secretaries, Education Office.

No. 20.—Special Report on the Carlow Female Industrial National School, by H. L. Darcy, Esq., District Inspector.

Carlow.

Kilkenny, December 15, 1852.

Gentlemen,—The industrial department of this School has been several years in operation, and the work supplied to the children attending it has been a principal means of support to many families of the poor in the town and neighbourhood, in years of privation and distress.

On the 20th of October—the day of my visit—I found 218 children present receiving literary and industrial instruction in two school-rooms, affording ample accommodation, and well provided with every necessary appliance.

This School is conducted by the nuns of the "Presentation" Order, who devote a great deal of their time and attention to the efficient working of it; and the advantages conferred on the children of the poor, without reference to religious belief, are fully appreciated by the inhabitants.

There were 45 children engaged in embroidering muslin, supplied by the Messrs. Wallace, of Glasgow; and, though they worked four hours a day, I was informed they could earn only about one penny a week each. That they should continue to work at it with such wretched remuneration, must be a matter of surprise to every one unacquainted with the habits of industry and order inculcated in National Schools, particularly in those connected with religious communities.

Appendix G.

Reports of District Inspectors on Industrial Schools.

Carlow.

Twenty girls were employed at plain needlework, embroidery, and crochet knitting, on material supplied by the "Irish Work Society" of London, and these earned from four to five shillings a week. Twelve grown girls, who attended solely to needlework, were occupied in executing orders from private families; and as the style and finish of their work was very superior, some of them earned six shillings a week.

Literary instruction commences at 9 o'clock, and ends at 12; industrial instruction commences at 12, and ends at 3 o'clock.

The attention to personal cleanliness, tidiness, and order on the part of the pupils, is a very pleasing feature in the character of this School.

One room is set apart for an Infant School, and is fitted up with a gallery, object lessons, ball frame, &c.; it is conducted by one of the sisters, who evinces much skill in developing the intelligence of the children.

I have the honour to be, Gentlemen, your very obedient servant,

H. L. Darcy.

The Secretaries, Education Office.

Midleton.

No. 21.—Special Report on the Midleton Female Industrial National School, County Cork, by James Doheney, Esq., District Inspector.

Lismore, December 28, 1852.

Gentlemen,—I visited the Midleton Female Industrial National School on the 24th November last, and ascertained, from its conductors, the ladies of the convent, the following particulars:—

They have not kept regular records of the numbers who attend at work; but they state that the entire number of their pupils work at sewing, embroidery, &c., from $11\frac{1}{4}$ till 1 o'clock daily; that of these about 60 spend all the time from $11\frac{1}{4}$ till 3 o'clock at work, being taught reading, spelling, and writing from 10 till $11\frac{1}{4}$ daily; and 90 others spend most of the school-hours at work, but get instruction in arithmetic, grammar, and geography from $1\frac{1}{2}$ till $2\frac{1}{4}$ o'clock, p.m. The dimensions of the room now used as a work-room, are 24 by 18 by 12 feet, and it is supplied with all the necessary furniture.

The girls can earn from 1*s.* to 6*s.* per week at the work, according to their expertness and skill. The ladies show specimens of "French embroidery," crochet work, &c., done in the most elegant style. Of these, and of the other descriptions of embroidery, they say that the "Irish Work Society" of London are the best purchasers. All manner of netting and knitting is done, and much plain work, which last is chiefly sold at home. The religious ladies themselves are now the only instructors: they supply all the materials, and dispose of the

work. What the pecuniary results may be to them, I have not been able to ascertain.

I have the honour to be, Gentlemen, your obedient, humble servant,

James Doheney,
District Inspector.

The Secretaries,
Education Office, Dublin.

Tallow.

No. 22.—Special Report on the Tallow Female Industrial National School, County Waterford, by James Doheney, Esq., District Inspector.

Lismore, December, 1852.

Gentlemen,—I visited the Tallow Female Industrial National School on the 27th instant. There were then present at work 73 of the entire number on the books (560); 12 are engaged constantly at work, 113 others are mostly so engaged, but attend literary instruction from $9\frac{1}{2}$ till $1\frac{1}{2}$ o'clock daily. The work done is principally lace embroidery of the Limerick, English, Honiton, Maltese, and Valenciennes patterns. Two of the religious ladies direct and superintend the work, in which they are assisted by three girls, whom they have trained for the purpose, and to each of whom they pay 4*s.* a-week wages.

The most perfect workers can earn 5*s.* a week each; the most inferior can earn 1*s.* 6*d.* a week, the earnings of the others fluctuating between these items. Those that earn most, work from 8 till $9\frac{1}{2}$ A.M., and from 1 till $9\frac{1}{2}$ P.M.

Messrs. Goblet and Balmer, of London, have a contract for the lace work, and supply the materials.

The Industrial School commenced operations about $3\frac{1}{2}$ years since, with only three pupils at first, and aided by a grant of £10 from his Grace the Duke of Devonshire. Since that time, about £400 has been paid in wages alone. About 60 of those now employed have been taken from the Tallow Branch of the Lismore Workhouse, and are thus taught to support themselves, and to assist their poor parents; 18 others (orphans) have been rescued from poverty and exposure to vice, by the Rev. Dr. Cleary, R.C.C., Tallow, and located in a house provided by him adjoining the Convent, where they support themselves by their work, and lead most exemplary lives. Thus is this excellent School diffusing comfort and happiness among the poorest of the poor of the little town of Tallow and its neighbourhood.

I have the honour to be, Gentlemen, your obedient servant,

James Doheney,
District Inspector.

The Secretaries,
Education Office, Dublin.

APPENDIX G.

Reports of District Inspectors on Industrial Schools.

Millstreet.

No. 23.—SPECIAL REPORT on the MILLSTREET FEMALE INDUSTRIAL NATIONAL SCHOOL, by SAMUEL ADAIR, Esq., Sub-Inspector of National Schools.

Millstreet, March, 1853.

GENTLEMEN,—In compliance with your instructions of the 18th instant, I beg to submit the following report upon the industrial department of the Millstreet Female National School :—

The literary and industrial departments are carried on in a house attached to the Millstreet Presentation Convent. The house is two stories high, and contains two school-rooms, well furnished, lighted, and ventilated. The lower room is occupied by the ordinary pupils from the town and neighbourhood; the upper is solely devoted to the accommodation of the female pauper children belonging to the Millstreet Union, who are allowed by the Guardians to attend here daily, on account of the superior instruction and comfort afforded them by the ladies of the convent.

From 11 to 1 o'clock daily is devoted to *industrial instruction*. All except the very young children are employed at needlework of some sort during these two hours. Some of the more advanced pupils, who may choose to remain after the ordinary school-hours for the purpose of practising knitting, sewing, &c., are allowed to do so from 3 to 5 o'clock, and are superintended in their work by some one or more of the ladies of the convent.

No regular or separate accounts have hitherto been kept of the numbers employed each day at the different industrial branches. The following statement, however, shows the attendance in the entire School :—

Present at time of inspection, ...	244
Highest number on the books for the last six months,	704
Average attendance for ditto ditto, .	262

Of these, every pupil who is old enough, receives instruction in *sewing*, at least. Those present at the time of my visit belonging to the industrial division, were thus employed from 11 to 1 o'clock daily :—

Sewing (plain), ...	34
Knitting (fancy), ...	20
Ditto (plain), ...	34
Crochet and Netting, ...	20
Lace-making, ...	15
Embroidery (muslin)	20
Total	143

The pauper children are included in the above numbers.

At present the greater portion of the work is supplied by the pupils themselves, and by the inhabitants of the town and neighbourhood. Sewing and knitting are more attended to

Millstreet.

than any of the other branches. Netting, crochet work, and lace-making have been introduced on a limited scale; but as yet no steps have been taken towards obtaining regular supplies of the raw materials, or a market for the manufactured article.

Muslin embroidery was introduced into this School in October, 1851, under Miss Jordan, a Teacher sent down by the Commissioners, and paid by them at the rate of 8s. a week. She, however, held the situation only six months, having left in March, 1852. No other Teacher of this branch has yet been appointed. The materials for this work were furnished by the Messrs. Wallace, of Glasgow, who took the articles when embroidered, and paid for the work in proportion to its quality. The emoluments accruing to the pupils from this source were so very trifling that it was not considered desirable for them to continue working the goods supplied by the Messrs. Wallace. The Superioress of the convent is at present in communication with other parties, with a view to obtain for the pupils a supply of work of a similar kind, which she hopes may prove more remunerative.

No accounts have been kept of the earnings of the pupils in any of the industrial branches, so that I am unable to state the amount realized by their labour during the past year.

It is determined to reorganize the sewed muslin work; it is also proposed to keep accounts of receipts and expenditure in future.

I hope when next required to report upon this School, I shall have considerable progress to record, as well as to be able to state more particularly the amount of pecuniary advantage derived from it by the pupils.

I have the honour to remain, Gentlemen, your obedient servant,

Samuel Adair,
Sub-Inspector.

The Secretaries,
Education Office, Dublin.

St. Vincent's.

No. 24.—Special Report on the St. Vincent's Industrial National School, Loughrea, County Galway, by J. M'Sweeny, Esq., District Inspector.

Gort, March 21, 1853.

Gentlemen,—In obedience to your instructions, I beg to lay before you, for the information of the Commissioners of National Education, the particulars connected with the working of the St. Vincent's Industrial National School.

APPENDIX G.

Reports of District Inspectors on Industrial Schools.

St. Vincent's.

The Industrial School is held in the upper story of a detached house, which stands on the grounds belonging to the convent of the Sisters of Mercy, who superintend its operation. The lower story is appropriated as the Literary School-room. Its dimensions are 45 by 17 by 9 feet. It was opened for the reception of pupils in April, 1852.

The number on the rolls at present is 38, the average for past year was 26, the number present to day was 24. Of this number, 21 were employed in embroidering unbleached muslin, and 3 were engaged in plain sewing, and in cutting-out.

The industrial branches taught are, knitting, sewing, cutting-out, and embroidery.

The School opens at 9, and closes at 4 o'clock, P.M. Of the seven school-hours, $4\frac{3}{4}$ hours are devoted to industrial duties, $1\frac{1}{4}$ hours to literary duties, half an hour to play, and half an hour to religious instruction, viz., from $11\frac{1}{2}$ to 12.

Of the 24 pupils present at my visit, 3 pupils were able to earn 3*s.* per week, 15 pupils were able to earn 1*s.*, and some, 1*s.* 6*d.* per week ; 6 pupils were learning how to work.

The materials for working are supplied by the Messrs. Wallace, of Glasgow, and they consist of unbleached muslin, with the design printed thereon. The pupils are paid the full proceeds of their labour.

The pupils who attend this School are of the poorest class, and their ages range from 14 to 19 years.

Although the general weekly wages earned by the pupils is very moderate, yet, in a comparative point of view, it is very important. I asked several of the pupils, whether they had ever been employed at any other work before they entered this School, and they replied, *they never had.* I asked, whether they had earned money ever before, and the reply was, *none.* Here the great advantage of these Industrial Schools presents itself ; for to these poor pupils, time was a waste, and their helpless and chilling poverty scarcely allowed them to feel life a blessing ; but the art, by which they can earn even a little money, inspires them with a spirit of self-reliance ; and the moral training and literary instruction cannot fail to exercise a salutary influence on their future career.

The Commissioners of Education have made a grant of £20 towards the support of both the Industrial and the Literary School.

I have the honour to remain, Gentlemen, your very obedient servant,

J. M'SWEENY.

The Secretaries,
Education Office, Dublin.

No. 25.—Special Report on the Industrial Department of the South Dublin Poor Law Union National Schools, by W. Mac Dermott, Esq., District Inspector.

December, 1852.

Gentlemen,—I beg leave to lay before you, for the information of the Commissioners of National Education, my Report on the industrial department of the South Dublin Poor Law Union Schools.

At my last visit to the National School attached to this Union, there were present 257 boys, of whom a considerable number were employed in learning various branches of Industrial occupation, viz., shoemaking, tailoring, weaving, baking, and carpenters' work. The boys are taught by men who have been regularly apprenticed and admitted to exercise those trades, and who reside out of the establishment, being paid a weekly salary, varying from 10*s.* to 26*s.* each. There are several adult paupers in the house, who have served their apprenticeship, and have been admitted as qualified journeymen, and these assist the boys in the work of the several trades to which they are attached.

Shoemaking department.—There were present in this department five men, and twenty-five boys, who are taught by three masters, one of whom is paid 15*s.* per week; the other two, 10*s.* each per week.

Tailoring department.—There were present in this department eight men and twenty-five boys, who are instructed by one master-tailor, whose wages are 15*s.* per week.

Weaving department.—There were ten men and forty-eight boys, present, taught by one master-weaver, who is paid 15*s.* per week.

Baking department.—There were nine men and five boys, present, superintended by one master-baker, who receives £1 6*s.* per week.

Carpenters' department.—There were present, four men and four boys; they are taught by one master-carpenter, whose stipend is 15*s.* per week.

Accounts.—None are kept in these departments, save an entry of the name of each person employed, and of his daily attendance at work.

Regulations.—Both boys and men are required to be present in their several workshops, from 7 A.M. till 7 P.M., in summer; and from 9 A.M. till 7 P.M., in winter, with the exception of the hours for meals. The boys are engaged in the workshop and at school during alternate weeks. The ages of those boys range between 12 and 15 years; all above the latter age are considered as adults, and receive no literary instruction whatever.

Remuneration.—None except the teachers of the several trades receive any pecuniary remuneration; the pauper men

Appendix G.

Reports of District Inspectors on Industrial Schools.

South Dublin.

and boys being considered sufficiently rewarded by the benefits afforded them, in food, clothes, lodging, and education.

It is a pleasing reflection to find that all the shoes, clothes, bread, &c., required by this Union, are made within its walls, teaching him, perhaps, who has been heretofore an idle, wandering mendicant, the value of time, and self-dependence.

Female Department.

In the Female School there were present, 202 girls, and 148 infants. None of the latter, of course, can be expected to be engaged in any industrial pursuit. Among the more grown girls, there were present 110 engaged at plain sewing and knitting, and 40 at embroidering on muslin. The latter are instructed in this branch by a young woman, who receives 8*s.* per week, with her rations, from the Union.

Remuneration.—Except those who teach the children, none here receive any remuneration.

I have the honour to remain, Gentlemen, your obedient servant,

W. Mac Dermott.

Naas.

No. 26.—Special Report on the Industrial Department of the Naas Poor Law Union National Schools, by W. Mac Dermott, Esq., District Inspector.

December, 1852.

Gentlemen,—Agreeably to your instructions, I herewith transmit, for the information of the Commissioners, my Report on the industrial department of the Naas Poor Law Union Schools.

At my last visit to the National Schools attached to this Union, there were present 143 boys, several of whom were employed at stated hours in learning the arts of shoemaking, tailoring, baking, weaving, and carpenters' work.

The following Table shows the number of Teachers of the above trades, the annual amount of their remuneration; also the number of paupers, men and boys, employed at trades at my last visit:

Trades.	No. of Master Workmen.	Annual Wages of Master Workmen.	Paupers.	
			Men.	Boys.
		£		
Shoemaking, .	One, .	16	–	12
Tailoring, . .	One, .	18	–	12
Baking, . .	One, .	39	–	9
Weaving, . .	One, .	26	–	13
Carpentry, . .	One, .	—	1	3

All the trades, except the carpenters and shoemakers, supply the Union with all the various articles of their respective manufacture that may be required.

All the master workmen reside in the Workhouse, and are allowed rations in addition to their pecuniary salaries. None of them are paupers, except the carpenter, who, consequently, receives no wages.

The Accounts.—The master workmen have each a book, in which is kept an account of the number of persons employed in his department; together with the amount of the materials supplied to him, and how he has disposed of the same.

Regulations.—All those employed at trades work eleven hours each day in summer, and nine in winter. The boys under fifteen years of age thus engaged, receive literary instruction for three hours each day.

Remuneration.—None except the teachers receive any pecuniary remuneration; the paupers being considered sufficiently rewarded by the benefits they enjoy in education, food, clothing, and lodging.

Female Department.

There were present in the Female School 216 girls and infants; of that number, there were 80 employed at knitting, 40 at plain sewing, and 60 at embroidering on muslin. They are thus engaged for one hour daily, except on Saturdays; but some of the more grown girls work all day at the last-mentioned branch of needlework.

Remuneration.—The teacher of embroidery receives from the Union £15 per annum, with rations. The produce of the sewing department is sold to the public, but realizes no profit.

The Farm.

There is a farm of about five acres attached to this Union. The number of men and boys employed thereon, varies from fifteen in summer to about thirty-five in winter. The age at which boys are considered fit for field-work is fifteen years, when they are rated as adults. The profit of the farm for the year 1852 was about £100; but it is to be remembered, that the land was worked exclusively by *free* labour.

I have the honour to remain, Gentlemen, your obedient servant,

W. Mac Dermott.

The Secretaries,
Education Office, Dublin.

No. 27.—Special Report on the Industrial Department of the Rathdown Poor Law Union National Schools, by W. Mac Dermott, Esq., District Inspector. *Rathdown.*

December, 1852.

Gentlemen,—I beg to lay before you, for the information of the Commissioners, my Report on the industrial department of the Rathdown Poor Law Union School.

At my last visit to the National School attached to this

Appendix G.

Reports of District Inspectors on Industrial Schools.

Rathdown.

Union, there were present 91 boys, several of whom are employed for certain portions of the day in acquiring the arts of shoemaking, tailoring, weaving, and baking, under the instruction of persons who, as I am informed, have been themselves regularly admitted to work as journeymen, according to the by-laws of their respective trades.

The following Table shows the number of master workmen of the above trades at present employed in the Union, the amount of remuneration they receive annually, together with the number of paupers, men and boys, whom they instruct in those trades respectively:—

Trades.	No. of Master Workmen.	Wages of Master Workmen.	Paupers instructed.	
			Men.	Boys.
		£ s.		
Shoe-making, . .	1	22 10 per annum.	9	30
Tailoring, . . .	1	30 0 ,,	5	30
Weaving, . . .	1	31 4 ,,	1	12
Baking, . . .	1	52 0 ,,	3	1

All the master workmen reside out of the Workhouse. They and their pupils are engaged about six hours daily at the above occupations.

Regulations.—All the boys under 15 years of age receive daily 4½ hours of literary instruction. All boys above that age, being considered adults, receive no literary instruction whatever.

Remuneration.—Except the Teachers, none receive any pecuniary remuneration. Those paupers who may give their labour in those employments at which they may be engaged are considered sufficiently rewarded by the personal accommodation they receive from the Union.

The Accounts show merely the number of men and boys engaged in the several industrial departments, with the time that each is daily employed in those branches.

The Female Department.

There were present in the Female School 123 girls, of whom 22 were employed in flax spinning, 4 in spinning wool, 2 in cotton spinning, 2 carding wool, 30 at plain sewing, 10 at fine knitting and crochet work.

All the above are engaged daily at these branches for four (not consecutive) hours. The remainder of the pupils, except the infants, are engaged for two hours daily at the coarser kinds of sewing and knitting.

On Tuesdays the elder girls are employed in scouring the dormitories, and washing a portion of the younger children's clothes.

On Saturdays, besides being similarly engaged, they repair their clean clothing for the ensuing Sunday. On these days, also, each child is washed and cleansed in a warm bath.

Remuneration.—In this, as well as in that of the male department, the only person receiving any pecuniary remuneration is the Teacher of the Literary School, who also superintends the industrial department, assisted by some of the paupers, who teach the spinning and needlework. With the care and assiduity of this young woman I think the guardians have reason to be satisfied, she having so well qualified her pupils for literary and industrial pursuits, that many of them of late have obtained comfortable situations in respectable families, and the Union has been spared the expense of sending out those poor creatures in search of fortuitous employment in a foreign land.

Perhaps it would be difficult to overstate the merit and value of this department. The girls are taught not only the ordinary branches of sewing, but are also skilled in flax and cotton spinning, carding, &c. The fine knitting in cotton wrought here is of such exquisite execution, that it appears more like silk than cotton fabric.

About two years ago this School afforded no more than the ordinary routine of literary instruction and plain sewing; but, by the exertions of the guardians (for it might appear invidious to specify any one individual where all are so anxious for the welfare of those under their charge), a considerable number of spinning wheels and reels were purchased in Listowel, County Kerry.

The farm of the Union having previously grown some flax, the children were set to work immediately under the direction of a qualified person. Since then, their efforts have been most successful, so that from the skill of those little girls, united with that of the weaving, tailoring, and shoemaking departments, almost every article of dress used in the Union is the produce of their labour.

I have witnessed the working of several Poor Law Unions, and this, in my opinion, is the only one I have seen that, perhaps, effectually realizes the intentions of the legislature when founding those most valuable and humane institutions.

The Farm.

The farm attached to this Union consists of eight acres, and is generally considered productive; but the free labour by which it is worked is not taken into consideration.

During the summer half-year, ten men and eighteen boys are employed on it; but, during the remainder of the year, the labour of thirty men and thirty boys (all paupers), was required. The boys engaged at agriculture have reached the age of fifteen years, and, therefore, are deemed adults.

The establishment of a farm in a Poor Law Union, besides imparting a more approved skill in agricultural affairs, has also the recommendation of improving the health of those so engaged, who otherwise, by confinement and inaction, would probably become delicate and sickly, and thus their condition would be the more deplorable.

APPENDIX G.

Reports of District Inspectors on Industrial Schools.

Rathdown.

The guardians have lately applied to place this farm in connexion with the Board, and under the supervision of their agricultural inspector.

I cannot conclude this Report without here noticing the following fact, so creditable to the guardians of the Rathdown Union, and which, perhaps, may lead others to similar exertions.

A gentleman from England, of high official standing, and considerable experience in these matters, having some months past visited this Union, expressed his fullest satisfaction with the manner in which all its departments were worked, and declared that, in his opinion, it ought to be considered a model for all other Poor Law Unions in the empire.

I have the honour to remain your obedient servant,

W. MAC DERMOTT.

Kenmare.

No. 25.—SPECIAL REPORT on the KENMARE INDUSTRIAL NATIONAL SCHOOL, for 1852, by THADDEUS MACNAMARA, Esq., District Inspector.

Killarney, January, 1853.

GENTLEMEN,—In compliance with your instructions, I availed myself of the earliest opportunity afforded me in the present year to visit the Kenmare Industrial National School, and I now beg to submit, for the information of the Commissioners, my Special Report on the progress of the Industrial Department for the year ended 31st December, 1852.

This School has been in operation since the commencement of 1852, when it was founded by the Rev. John O'Sullivan, P.P. of Kenmare, by whom all the preliminary expenses, rates, rent, &c., have been personally undertaken. Its foundation, and whatsoever success it has since attained, are ascribable to the same wise zeal for education and improvement which induced him, notwithstanding many obstacles, to co-operate with the Commissioners in erecting in the surrounding district no less than eleven National Schools, all vested by him in the Commissioners in their corporate capacity, and distributed over an extended range of remote and mountainous country, where only the rudest degree of social life previously existed, and where the elements of progress had scarcely penetrated.

The building, an isolated and recent structure, consisting of two stories, and intended to have formed one of a row of dwelling-houses, is situated about one hundred yards from the principal street in Kenmare, and adjoins the footway on the Bantry road. It is permanently constructed, the principal material being limestone, and the roof slated, while the walls are plastered and coloured to represent cut stone, the windows and door painted, and its aspect generally, though plain and devoid of architectural interest, is neat and respectable.

The interior contains two commodious apartments for

school purposes, and one smaller one for the accommodation of the Teacher, over which is an apartment that has not been made use of hitherto; but arrangements and fittings-up are being completed in it, in anticipation of an increased attendance. In the lower room, which has been found of sufficient size to accommodate the usual average of attendance, the School has hitherto been conducted. It measures in length 31 feet, in breadth 16 feet, and in height 10 feet. It is boarded, well lighted, warmed, and ventilated, and adequately furnished with work-tables suitably arranged, forms, a book-press, a desk for the Teacher, and other necessary apparatus. The walls, plastered and recently whitewashed, are hung with the usual requisites, including the National School Rules, General Lesson, Time Table, and four large maps.

It is proposed to devote two hours daily to literary instruction, viz., from 10 o'clock, a.m., to 12 o'clock, when industrial occupation is to begin, and at its termination, at 4 o'clock, it is intended to devote half an hour to religious instruction. Owing, however, to the interruption of the Christmas vacation, and the previous illness of the Teacher, the regulations for the government, organization, and classification of the School, upon its connexion with the Board, are only in process of being completed.

But one Teacher presides in the School. She is a respectable young person, 22 years old, seems fully competent to conduct the industrial training of the girls, and is respectably qualified to give them literary instruction, which she has also undertaken. She receives no payment from the pupils, nor has she any other emolument than that which the Commissioners allow her, viz., £10 as industrial and £10 as literary Teacher.

From the exaggerated notions of the remuneration likely to be gained, and from the interest attached to novelty, as might be expected, the attendance at the opening of the School was much larger than after the lapse of some months. The sole account of attendance regularly kept, up to January, 1853, was of the number of girls present each day; and a reference to that document shows a daily average of 40 girls. On the register recently furnished by the Board, appear the names of 57 girls, whose ages average nearly 15 years. This enrolment has, however, but just commenced, and it is expected the number will largely increase, both because of the good prospects of the School, and as by its connexion with the Board it will gain additional efficiency.

Literary instruction will embrace the subjects usually taught in National Schools, and the books to be made use of are those published by the Commissioners. The 57 girls above alluded to have been already classified as follows:—

Reading Sequel to Second Book of Lessons, .	20
,, Third Book, ...	18
,, Fourth do.	19
	57

APPENDIX G.

Reports of District Inspectors on Industrial Schools.

Kenmare.

A rule has been adopted, which is strictly to be followed, viz., that no girl shall be allowed to attend the School who is not able to read with ease and intelligence the Second Book of Lessons, at least. On the day of my visit, the School had but just opened after the Christmas vacation, and there being no pupils present, I am unable to speak of the progress made in the literary subjects. This happened to be the first day of opening, and the weather being extremely inclement, the pupils did not attend.

Industrial instruction is at present limited to plain sewing, in which the girls are taught to fashion and perfect the various textile articles of use in domestic life, and to embroidery, crochet, and guipure,—the articles produced from the three latter operations being chiefly ornamental portions of ladies' attire, exhibiting great ingenuity and taste in design, and appearing to the uninitiated marvels of skilful manipulation.

Materials for plain sewing is furnished to the School by many of the shopkeepers of Kenmare, and by other residents of the town and of the surrounding district. The supply of work varies in amount, being sometimes abundant and at other times scanty, but it is always fairly remunerative to those employed at it. It may be observed, that whatever diversity of opinion may exist regarding the ultimate benefits of the other branches of industrial instruction, of the advantages the girls obtain in acquiring skilfulness in plain sewing no doubt can be entertained. For economy and convenience in every locality, it is obviously a matter of great importance to females of the humbler classes to be skilled in an art of such continual requisition in domestic management; and in no locality, from its poverty and backwardness in almost all the arts of industry and civilized life, was an effective means of this accomplishment more wanted than in Kenmare and its neighbourhood. In contiguous localities, I am assured, so unskilled are the females, that the arts of a sempstress and dressmaker are practised by the rural tailors, whose notions, it may easily be conceived, of what is neat or graceful, are crude in the extreme.

Embroidery, consisting of designs wrought on muslin with the needle and thread over patterns previously printed thereon, the material for which has been furnished by the Society for the Promotion of Irish Industry, Anglesea-street, Dublin, is not latterly practised with the same avidity as at the opening of the School. The causes of this unpopularity are similar to those which elsewhere have been attended with the like results, viz.—the great labour of the process, the tardiness in acquiring skill, and the totally disproportionate remuneration subsequently realized. By this operation, the most assiduous and skilled of the girls can earn, at furthest, but from 1*s.* 4*d.* to 1*s.* 6*d.* weekly,—the usual rate being from 10*d.* to 1*s.*; consequently, most of them have abandoned embroidery, and have engaged themselves at other and more lucrative branches.

Should, however, the Society be able to raise its scale of payment, or should other sources, securing more satisfactory remuneration, present themselves for the supply of this species of work, I entertain no doubt the girls would readily again undertake it.

Crochet was introduced soon after the opening of the School, at the instigation of a Cork mercantile establishment, which continued to purchase the produce of the girls' industry at fairly remunerating prices, until the beginning of the summer months, when a market much more lucrative, and nearer home, presented itself. Among the crowds of tourists, who, at this season, pass through Kenmare, on their way to enjoy the scenery of Killarney, the girls found willing purchasers of the numerous tasteful articles of crochet-work, and at prices far more remunerative than the Cork establishment allowed. This circumstance greatly stimulated the hopes and energies of the girls; and so great did their assiduity become, that several of them earned so much as from £5 to £6 each. The certainty of this source of emolument, continues to act favourably on the attention and assiduity of the girls; and will, it is expected, contribute, in a great measure, to secure a large and regular attendance.

Guipure, an operation somewhat resembling crochet, has recently been undertaken, and promises to be very productive. The School is indebted for its introduction to no less a person than the Marquess of Lansdowne, who, upon some specimens of the school-work being presented to him for acceptance by the ladies of his family circle, communicated with an establishment in London, which offered to purchase any quantity of guipure made after certain patterns. The Marquess having kindly communicated this information to the Rev. J. O'Sullivan, the latter immediately supplied the School with all the necessary implements, and material for working in this branch. The scale of prices which the London house expresses itself willing to pay, is such as to warrant the most favourable anticipations of emolument. Among the circumstances which promise stability to the School, the interest for its success expressed by Lord Lansdowne is looked upon as a most important feature, which derives additional significance from his Lordship's promise of an annual subscription,—liberality which will be better appreciated, when it is remembered there are nine National Schools in the vicinity, and neighbouring localities, already indebted to him for endowment.

During the year the aggregate sum of £90 was realized from these several operations; which, on an average attendance of forty, would give £2 5*s.* to each girl. From the imperfect manner in which the accounts were kept, I am unable to particularize the sums produced by each species of work; but from an estimate which the Teacher made, it would appear that two-thirds, at least, of the £90, were realized from crochet. By the adoption of a more systematic method of entry, which has recently been introduced, the accounts and

APPENDIX G.

Reports of District Inspectors on Industrial Schools.

Kenmare.

statistics of the School generally can be given more satisfactorily, and in detail, for each succeeding year.

Considering the short period during which the School has been in operation, and the many difficulties against which such an establishment has at the outset to contend, the result here indicated cannot be looked upon, by any means, as unfavourable.

I deem it superfluous to remark on the general utility of establishments, whose object is the simultaneous cultivation of the minds, morals, and industrial energies of female youth, the importance of which every one admits, and modern civilization attests; nor do I think any question should arise regarding the policy of their foundation and support, except such as is applicable to ordinary National Schools, or other public institutions, viz.: referring to funds for the purpose, and to the probabilities of there existing the requisite local facilities which would promise efficient management. The particular benefits likely to result from Industrial Schools in the South of Ireland should appear obvious to any one acquainted with the habits and social condition of the people. It may be remarked, that Schools in which a combination of literary and industrial instruction is skilfully and successfully adopted, are certain to be attended with one good result,—from the prospect of emolument they hold out, they are calculated to remove, in a great measure, the chief impediment to female education that exists in the South of Ireland—viz., irregular or non-attendance at School. This great evil originates in many causes, prominent among which is a conviction in the minds of the people, that females need little or no education, and may, without injustice done them, be employed from their tenderest years in domestic servitude. A necessary consequence of this false supposition, is the improper training of the female youth, and thereby the perpetuation of those obnoxious habits which so long have socially degraded the South of Ireland; and the evil effects which the low standard of domestic comfort and living has exercised on the energy, industry, and forethought of the people, have been, within the last past years, but too fearfully illustrated. From the healthful influence of mental culture, associated with industrial training, and its consequent pecuniary results, making attendance at school sensibly felt at home, it may be anticipated that the mischievous notions respecting female education, might, in the sphere thus happily influenced, gradually disappear.

The Kenmare Industrial School would appear calculated to produce the beneficial results briefly glanced at, and seems surrounded by the auspicious circumstances which promise skilful management and permanent advantage.

I am, Gentlemen, your obedient servant,

THADDEUS MACNAMARA,
District Inspector.

No. 26.—Special Report on the Kinsale Industrial National School, County of Cork, by Michael Coyle, Esq., District Inspector.

Kinsale.

District 44, Cork, April 23, 1853.

Gentlemen,—I beg leave to submit the following Report, for the year 1852, on the Kinsale Industrial National School.

It continues to be held in the room already described in the former reports; and the hours of attendance and general arrangements remain unaltered.

The funds expended in the purchase of the materials and paying assistants, are supplied solely by the nuns.

The three Teachers paid by the Board for teaching the branch called sewed muslin, were withdrawn, and the industrial instruction in that, as well as the other branches is given by the Nuns, assisted by eight Monitresses, paid by them. Some of these assistants are boarded and lodged; others are paid in cash; and according to the nuns' estimate, they cost them £96 per annum, or £8 per annum each, on the average. The grant from the Board continues to be only £30 per annum. The average attendance for the last six months, was 420.

The amount received for the work sold during the year was £717 2*s.* 10½*d.*, which, minus the expenses, was distributed amongst the pupils or workers.

The branches taught are the same as I detailed in former reports. From 60 to 80 pupils are able to work the sewed muslin, which, however, is not found so profitable as other branches; but, it has been found a good resource, when other work is not in demand, whilst it is an excellent *preparatory exercise*, those who overcome its difficulty being qualified to undertake most other branches. It may now be regarded as established in Kinsale, and, so far, the experiment made by the Board to introduce it, has succeeded.

This institution does not require praise, its success is its best eulogy. It is independent even of charity, for the excellence of its work commands a market at home and abroad; and in compliance with orders, there are parcels now on their way to the Cape and Australia. Co-operation will be gratefully acknowledged, but the purchaser will receive full value; and, though his patronage will confer a favour, it will not be attended by any loss. This triumph of patience, zeal, and perseverance affords a lesson to all Ireland.

But much as the nuns have accomplished, they could have done far more if they had more funds at their command. They complain of the small amount of aid given them by the Board—whilst their efforts confer such advantages on society, the results of which it is difficult to calculate—whilst they have nerved the arm of industry, and inspired poverty with hope, they feel deeply disappointed that the Board only allows them £30 per annum. I do not mean or wish to play the advocate; but as a member of society, as well as officially, I consider it my duty to endeavour to impress the Board with the import-

APPENDIX G.

Reports of District Inspectors on Industrial Schools.

Kinsale.

ance of this institution, and the inadequacy of the support it receives, convinced that if I succeeded, the Board would act in a manner befitting the occasion, not only in this case, but with regard to the industrial question generally. The good effects I have witnessed in this and similar schools—the result of small means administered with great skill, and the most persevering zeal, industry, and economy, gives a foretaste of the vast benefits that might be realized with more extensive co-operation, and more generous endowment.

I remain, Gentlemen, your obedient servant,

MICHAEL COYLE,
Inspector of National Schools.

The Secretaries,
Education Office, Dublin.

City of Limerick.

No. 27.—SPECIAL REPORT for the Year 1852, on the INDUSTRIAL NATIONAL SCHOOLS in the CITY of LIMERICK, by H. P. CLARKE, Esq., District Inspector.

Limerick, January, 1853.

GENTLEMEN,—In compliance with your instructions, I beg to transmit a Report on the Female Industrial National Schools in the City of Limerick for the year 1852.

ST. MARY'S INDUSTRIAL NATIONAL SCHOOL.

For the last four years an account of the state of this school has been published in the Appendix to the Annual Reports of the Board, and it still continues to be conducted under the same regulations as therein described, and with the same efficiency and success. I have given so full a description of the nature and objects of the institution, and of the rules upon which it is managed, in my Report for 1851, that it will be now only necessary to mention the good arising from it during the year just terminated.

Number in the house on Dec. 31, 1851, . .	40
,, admitted during the year 1852, . .	167
	207
Number discharged during the year 1852, . .	157
Number remaining in the house on Dec. 31, 1852,	50

Of the 157 discharged, 147 obtained situations as domestics, 1 emigrated, 1 is apprenticed, 1 taken away by her friends, 1 became Teacher of a National School, 4 obtained places as governesses in families, 1 is a housekeeper, and 1 was dismissed.

The greatest number in the house at any time during the year was 60, and the average attendance has been 52. The total number of admissions, since its establishment in the year 1838, is 2,533.

The amount of literary instruction given to the inmates has not in any degree declined. I find that three-fourths learn reading, writing, geography, and arithmetic, with the first elements of grammar; the remaining one-fourth are learning to read.

As has been remarked on a former occasion, the entire establishment is kept in a state of the most perfect order and neatness. The annual expense of supporting it is about £400, towards which the Commissioners contribute £20, with a supply of books, &c., for the School.

Mount St. Vincent Orphan National School.

Since the publication of the last Report, this School has been transferred to the new convent erected by the Sisters of Mercy at Mount St. Vincent, in the immediate vicinity of the city. The orphans are now there provided with spacious work and school-rooms, dormitory, refectory, &c., specially designed for their accommodation by an eminent architect. The building, erected at an expense of £4,000, is in a healthful and cheerful situation, nearly opposite to the site proposed for the District Model School about to be established by the Board; and the apartments are remarkably well adapted in every respect for the purpose to which they are appropriated.

The means of accommodating the orphans being thus increased, the number received has been proportionally augmented. Whilst in December, 1851, the number was but 35; it has been increased during the past year to 58, the number now in the house. The average attendance for the year is very little short of this, being 53.

The regulations of the establishment continue in every respect unaltered.

With respect to the amount of literary instruction imparted, I find 36 taught the Third and Fourth Books of Lessons, which they can read with fluency, and in many instances with expression, parsing in general correctly, and having some knowledge of geography; 10 learn the Second Book; and 12 have not advanced beyond the First Book. Writing and arithmetic are practised by all except these last.

The work consists of the performance of the various domestic duties, lace making, and all sorts of needlework. Out of the 58 inmates, 39 have learned to cut out and make their own clothes.

The grant from the Board towards this School is £10 a year, with a supply of books and other requisites; and I am of opinion that its increased efficiency, resulting from the very large expenditure subscribed by the locality for its improvement, affords sufficient grounds for extending to it a greater amount of aid, if the Commissioners should deem it expedient to do so.

St. Munchin's Lace School.

When noticing this School in my Report of last year, I stated that some further time should elapse before I could speak

Appendix G.

Reports of District Inspectors on Industrial Schools.

City of Limerick.

of the amount of profit to be obtained from the work, which consists exclusively of Valenciennes lace. I now find that out of 25 pupils, 4 earn 3*s.* a week, 7 earn between 2*s.* and 3*s.*, 4 earn between 1*s.* and 2*s.*, and 10 less than 1*s.* a week. This appears to me a tolerably successful result, and I have little doubt that the School will ultimately be the means of spreading a knowledge of this species of work in this country. The Sisters of Mercy, who established it, pay the children regularly whether the work has been disposed of or not. There is at present a stock of it on hands to the value of £40. It appears that the prices given by wholesale houses were not found to be remunerative, so that the work executed here is now sold to London retailers.

No special aid is received from the Commissioners towards the School; but the pupils are included in the returns of the St. Mary and Munchin's National School, held in the same building, which receives the usual grant in proportion to the attendance, and of which this is properly but the industrial department.

St. John's Industrial School.

A grant of £10 a year, as salary, is paid by the Commissioners to this as a separate School; but it may now be said to have become the industrial department of the St. John's Female National School. The Teacher's time is occupied in instructing the children attending the latter in the common sorts of needlework, taking them, as suggested in my last Report, in successive drafts of about 20 each. No payments are made to the pupils for the work; but the Sisters of Mercy, who supply the materials, and have the general charge of the School, distribute the dresses, &c., when completed, amongst the most destitute of them, who are here very numerous, the School being in one of the poorest localities of the city. Upwards of 100 females are taught to work, so that the aid afforded by the Board is well bestowed.

Pery Square Female National School.

The working of muslin embroidery was commenced in this School on the 1st October, 1851, as stated in the last report, a Teacher being paid by the Commissioners, and the materials being supplied by the Messrs. Wallace. About half the work had been completed in September, 1852, when the attention of the pupils was directed to a new species of work, crochet, introduced into the school by a lady who takes much interest in the welfare of the children, and who supplies the necessary materials for carrying it on, and disposes of it in a profitable manner. This lady has engaged an efficient Teacher, at a salary of £12 a year, and pays the workers regularly every week, for whatever they have completed. In this way she has dispensed £35, as wages, among about 70 workers, during the quarter ended the 31st December last. This appears to me a very successful result; and the regular weekly payments

have been so much more satisfactory to the pupils than the long delay in being paid for muslin embroidery, that they have ceased to practise the latter species of needlework. The number learning it has thus declined from 80 to 6, so that the Teacher paid by the Board for giving instruction in it should be at once transferred to some other School, with a sufficient attendance, where there is no work of a more profitable nature available. As the stock of muslin embroidery has not been finished, no portion of it has been as yet returned to the Messrs. Wallace, nor any payment for it consequently received. The experiment of introducing the working of muslin embroidery into this School, has thus failed, after a trial of 15 months. It is, however, satisfactory to know, that this has been perhaps chiefly owing to the introduction of work of a more profitable sort, and for which payment has been promptly and regularly made. If any advantage has followed the instruction given for so long a period in the working of muslin embroidery, it must be, what is probably the case, that some of the pupils have acquired an expertness in an art which they may find useful to them to practise at home.

Magdalene Literary and Industrial School.

This School was established at the suggestion of the Roman Catholic Bishop, Rt. Rev. Dr. Ryan, in the Magdalene Institution of this city. The object is that the penitents should be taught reading in addition to the industrial instruction afforded them; and beyond this it is not intended to extend the literary teaching. The School was opened in January, 1852, upon receipt of a supply of books from the Commissioners, under the care of the Sisters of the "Order of the Good Shepherd." It is situated on the convent grounds, and the school-room is also used for the practice of work.

The highest number of penitents in the house at any time during the year was 75, the number now remaining being 68. On the day of my visit these were occupied as follows:— learning to read, 20; in laundry and knitting, 34; sewing, 12; lace-making, 12; making church vestments, 3; making artificial flowers and embroidery, 3; baking and cooking, 4.

It is to be remarked that many females have been taken from time to time out of this establishment as servants, by very respectable persons, and they have conducted themselves in their situations with great propriety. Five have thus left the house during the year.

The persons admitted are often, not only in the lowest state of destitution, but their health is also frequently quite broken, so that deaths are not unfrequent: five have died in the last twelve months.

The experiment of teaching reading has been very successful in the hands of the sisters; and it may be hoped, that the increased means of obtaining instruction which they have thus placed within the reach of the penitents, will aid in carrying

APPENDIX G.

Reports of District Inspectors on Industrial Schools.

City of Limerick.

out the benevolent views of those who have originated and supported this charitable institution.

These are all the National Schools in the city that are recognised as Industrial, but there are four Female National Schools besides, in all of which the different branches of needlework are efficiently taught. There is also the School of the "Limerick Industrial Society," specially devoted to the teaching of muslin embroidery, which is doing much to spread a knowledge of this art. So great has been its success in this way, that an agent has been appointed by one of the manufacturers who gives out the work to be executed at the homes of the females able to undertake it, and who are now very numerous. The prospect of employment for females, in Limerick, has considerably improved of late. An additional lace factory, capable of employing 200, has been established, and a flax factory is drawing towards completion, in which 600 will probably be engaged. From these circumstances, I think it not unlikely, that, before very long, it will be difficult to retain the poorer class of females at exclusively literary schools.

I have the honour to remain, Gentlemen, your obedient servant,

HENRY P. CLARKE,
District Inspector.

The Secretaries,
Education Office, Dublin.

West Dublin.

No. 28.—SPECIAL REPORT on the Industrial Department of the WEST DUBLIN MODEL SCHOOLS, for the year 1852, by W. MAC DERMOTT, Esq., District Inspector.

GENTLEMEN,—I beg leave to lay before you, for the information of the Commissioners, my Report on the West Dublin District Model Schools for the year 1852.

I have already stated, in my general Report for 1849, that this establishment contains, besides work and class rooms, four spacious school-rooms, two being appropriated to the boys, one to the females, and one for infants (boys and girls).

Male School.—The Male School is conducted by a Head Master, an Assistant, three Pupil-Teachers, and four Paid Monitors. The Pupil-Teachers are paid £15 per annum each, and their period of probation here is twelve months, after which they are considered qualified for the special class of the parent institution in Marlborough-street, or are sent to take charge of National Schools, and so to become Teachers themselves.

The Paid-Monitors are taken from the most industrious and best conducted section of the pupils. They must be fourteen years of age before they enter on this duty, and their period of office is four years. They receive £4 for the first year, £5

for the second, £7 for the third, and £8 for the fourth year. Their duty is to assist the Masters in the management of the School, and teach the lower classes. Lest they should neglect their own education, while imparting information to others, they, with the Pupil-Teachers, are taught by the Masters every morning, from a quarter past eight o'clock until a quarter of ten, and again from three until four o'clock in the evening. Their course is—spelling, reading, grammar, geometry, mensuration, algebra, book-keeping, and dialectics.

This system of *Monitorial* instruction, as sanctioned by the Commissioners, is excellent, both in its operation and results: it mainly assists in the efficient working of the School, imparts a taste for order and regularity, while to the Monitors themselves it is of incalculable advantage. They commence this duty at an age when boys begin to feel the importance of education; and as their time of service extends over a period of four years, they have abundance of leisure to profit by the admirable course of instruction and discipline through which they pass.

Average attendance for 1852, . . .	176
Highest number on the roll for the same period, .	262

Religious Instruction is given every day, except Mondays and Saturdays, from half-past two until three o'clock. On Mondays from two to three o'clock, the time being enlarged on this day, in order to give the greater accommodation to the clergymen of the several religious denominations to attend here and instruct the pupils of their respective communions.

The Rate of Payment from the pupils is no more than one penny per week.

Female School.—This School is held in a spacious, airy apartment. Besides class and bonnet rooms, there is attached to it a work-room, well furnished with all the necessary apparatus.

It is conducted by a Head Mistress, an Assistant, and four Paid Monitresses. The latter receive the same amount of salary, and are subject to the same regulations as those already noticed in the Male School; and, with the exception of the scientific branches, their course of study is the same as that given to the Pupil-Teachers and Paid Monitors in the latter. It continues from nine until ten o'clock each morning, except on Saturdays they write in the afternoon from three until half-past three o'clock. This course is presided over by the Mistresses of the Female and Infant Schools, who perform this duty every alternate week.

Average attendance for year 1852, . . .	98
Highest number on the roll during the same period,	143

Religious Instruction is given every day, except on Thursdays and Saturdays, from a quarter of twelve to a quarter past twelve o'clock. On Thursdays from half-past twelve until half-past one o'clock, when the Roman Catholic girls receive

APPENDIX G.

Reports of District Inspectors on Industrial Schools.

West Dublin.

instruction from some of the ladies of the Order of Mercy, who attend here for that purpose.

The Industrial Department is conducted by a young woman, paid by the Commissioners, assisted by the Mistresses of the Literary School. Embroidery on muslin is taught by a young girl, formerly a pupil here, who, having acquired a competent knowledge of this art, and the better to excite the emulation of others, has been appointed to teach it at a smaller salary than that paid to her predecessor.

The numbers engaged at industrial employment, during the past year, was as follows:—

Plain-work,	92
Embroidering on muslin,	57
Knitting,	12
Marking,	20

The time devoted to these branches is, except on Saturdays, from half-past one until three o'clock.

Of embroidering on muslin, I regret to have to state that I find no ground for altering the opinion expressed in my Report on this School for 1851. (See Eighteenth Report of Commissioners, p. 803.) Indeed, there are various causes that operate against this species of industrial employment in National Schools generally being remunerative. First, the length of time necessary to the completion of any piece of fancy muslin, which produces among the pupils dissatisfaction and a distaste for the work altogether. Excepting in those National Schools under the immediate care of nuns, the time devoted to the industrial department is so very short, that the progress is necessarily slow, consequently not *encouragingly* remunerative; finally, the rate of payment by the wholesale dealer to the poor worker is so extremely small, that it is calculated to check rather than invigorate exertion. Under these circumstances, all that can be expected at present is to teach and diffuse an elementary knowledge of these arts as much as possible throughout the country; and although it may not in every case be found remunerative, it will at least enlarge the circle of a young woman's acquirements, and may be turned to useful account in many ways.

INFANT SCHOOL.

This School is conducted by a Head Mistress, an Assistant, and two Paid-Monitresses.

Highest number on the roll for 1852,	115
Average attendance for the same period,	70

The course of instruction consists of spelling, reading, writing on slates and paper, arithmetical tables, descriptive geography, and natural history, by means of object lessons.

Religious Instruction is given every day except on Mondays, Thursdays, and Saturdays, from half-past two until three o'clock. Mondays from two until three; Thursdays from half-

past twelve until one o'clock. On the latter days, as in the Female School, some of the Sisters of Mercy attend to give this species of instruction to the Roman Catholic children.

RECAPITULATION.

It is pleasing to remark, that notwithstanding the poverty of this locality, and the uniform practice of demanding the weekly penny (a sum which, however small, I have reason to fear, is often felt as a privation at home), it is still observable that very many of the scholars at present in these Schools commenced here in the first elements, and are now in the highest classes; thus showing the favourable progress the Schools have made, and the estimation in which the advantages afforded by them are held by the parents, who, in despite of their very narrow circumstances, willingly pay for that which they feel their children benefit so much from. The following particulars will illustrate the truth of what I have here advanced:—

Boys.—Of the ninety-nine boys now in the Senior School, twenty-six have passed through the Junior School. Of the thirty-three in the third class, twenty-one have graduated from the lower classes; and of the thirty-two in the fourth class, nineteen have passed through the lower classes.

Girls.—Of the eleven in the lowest class, seven came from the Infant School; of the nineteen in second class, seven were raised from the first or lowest class; of the forty in the sequel classes, thirty-two rose gradually from the first and second classes; of the sixteen in the third class, fourteen were promoted from lower classes; and of the twenty-three in fourth class, twenty-one rose gradually from the inferior classes.

Infants.—Of this School I could give a similar synopsis, did I not fear to make this Report unnecessarily long.

These particulars, I submit, show that the attendance is satisfactory—that the Schools have made, and are making substantial progress—and that the several Teachers are zealous, vigilant, and efficient.

As this establishment stands in the poorest section of the metropolis, and where the temptations to idleness are many, I have caused each of the principal Teachers to keep a book in which is entered the names of the absentees, to whose parents weekly notes are written, informing them of the absence of their children. This practice tends to check any truant disposition on the part of the latter, while the former must feel (and they have often expressed their gratitude for it), how much the interests of their children are attended to.

I have the honour to remain, Gentlemen, your obedient servant,

W. MAC DERMOTT.

The Secretaries.

APPENDIX G.

Reports of District Inspectors on Industrial Schools.

No. 29.—SPECIAL REPORT on the BAGGOT-STREET FEMALE INDUSTRIAL NATIONAL SCHOOL for 1852, by W. MAC DERMOTT, Esq., District Inspector.

Baggot-street.

GENTLEMEN,—I beg leave to state, for the information of the Commissioners, that this School is held in one of the apartments of the building lately erected by the Sisters of Mercy, for their National School in Baggot-street, and which is quite remote from the convent.

Number of pupils on the books for year 1852, 200; average attendance during the same period, 140. The ages of the pupils range from 12 to 25 years.

The work-room is well supplied with all the necessary apparatus, besides a great variety of seats and forms; there are five frames for Limerick lace work, three tables at which the girls work embroidering on muslin, crochet, and guipure; presses containing the raw material and finished work; and two marble reservoirs, which afford an ample supply of cold water, where, for the better securing of cleanliness and neatness of execution of the work intrusted to their care, each girl must wash her hands previous to the commencement of business.

The only Teachers are the ladies of the convent.

Regulations.—The externs enter the work-room at half-past eight in the morning, and remain at work until half-past eleven o'clock. They are then removed to the National School, where they receive instruction in the various branches of literary education, until two, when they again return to the Industrial School, and continue at work until five o'clock in the evening.

Besides the pupils of the National School, there are sixty young females, interns of this establishment, who are fed, clothed, educated, and instructed in plain and fancy sewing, together with laundry and household work. They continue in the house until suitable situations are provided for them, such as servants, nursery governesses, attendants on ladies, &c. and for which offices, judging from the instruction they receive, they must be well qualified.

The accounts consist of an "Order Book," showing the article ordered, and by whom; the material of which it is to be manufactured, and whether such material is to be supplied by the school or by the person who gave the order; the name of the pupil to whom the material is given to be wrought, with the dates at which it is given to and returned by the pupil, and at which it is delivered to the person who ordered it; the price received for it, and the amount of profit realized by the sale of it. There is also another book kept here, containing an account of the transactions between the sisterhood and the pupils, showing the several sums received by the latter for the work executed by them. These books are kept with admirable correctness.

At my last visit here, there were :—

Employed at	plain sewing,	25
,,	Limerick-lace work,	17
,,	Embroidering on muslin,	30
,,	Crochet,	30
,,	Guipure,	25

Baggot-street.

These are exclusive of the sixty interns, who are also engaged at the above works at various hours of the day.

Remuneration.—The ladies find that all these branches of needlework are remunerative, but consider embroidering on muslin as the least productive.

Embroidering in Gold.—Besides the industrial branches already mentioned, embroidering in gold has been lately introduced here. This is a species of female industry that is, I believe, solely confined, in this country, to this institution. It consists in working the rich altar, and pulpit robes, and ornaments used in the services of the Roman Catholic Church. The ladies showed me a most superb canopy, composed of white satin and gold, which they were working, per the order of the Rev. Dr. Spratt. The design and execution of this piece of art appeared of surpassing excellence, and confers the highest credit upon those by whose taste and industry it was produced. At present these articles are only obtained from France, and that at prices very high indeed ; but the ladies of this convent, animated with the generous desire of benefiting their poorer countrywomen, have now introduced this work into Ireland, where, should it succeed, it will be the means of keeping large sums of money in the country, which otherwise must be expended in a foreign land. Thus, this experiment, even in a commercial point of view, is of considerable importance, independent of the benefits it will afford in the cultivation of native industry and talent.

I have, in common with many others, seen, from time to time, some fine imported specimens of the work in question, but none of which, in my mind, come up to the beauty, taste, and high finish, which characterize the various and elegant articles manufactured in this institution.

I have the honour to remain, your obedient servant,

W. MAC DERMOTT.

The Secretaries,
Education Office.

St. Peter's.

No. 30.—SPECIAL REPORT on the ST. PETER'S (Whitefriar-street) FEMALE INDUSTRIAL NATIONAL SCHOOL, for the year 1852, by W. MAC DERMOTT, Esq., District Inspector.

GENTLEMEN,—This School is held in one of the rooms of the Female National School-house of St. Peter's, Whitefriar-street. It measures sixty feet square, and is appropriated exclusively to the industrial department.

Highest number on the books for year 1852,	1,166
Average attendance for the same period,	134

St. Peter's.

This room is well supplied with every accommodation necessary for its object, having, besides a sufficient supply of seats and forms, twenty-two tables, one quilting, and two Limerick-lace-work frames.

The Teacher, Margaret Smith, aged 23 years, is by profession a dress-maker; her salary is £12 per year, two-thirds of which are contributed by the Commissioners of National Education.

Regulations.—The children of the National School leave the latter each day at two o'clock, and enter the Industrial School, where they should remain, at least, until four o'clock; but who, with the exception of a few of the most industrious pupils, rarely stop after three o'clock.

The Accounts consist of a very informal species of report-book, and a large register, in which is entered the name and residence of the worker, occupation of parent, date of admission, description of the work executed, and the date of the receipt of payment.

At my last visit here, there were employed at—

Quilting,	5
Plainwork sewing,	66
Lace-work,	10
Knitting,	14
Marking,	4

Embroidering on muslin has been discontinued here, unless when specially ordered.

The above works have not been remunerative.

Last year there were several full-grown young women in attendance at this School, who seemed very anxious and attentive to their business; but none of this class attend here now. I understand, however, that there are a few of them who occasionally receive from this School some pieces of needlework, and execute them at their respective homes.

I have the honour to remain your obedient servant,

W. MAC DERMOTT.

The Secretaries, &c., &c.

Tipperary.

No. 31.—SPECIAL REPORT on the TIPPERARY FEMALE INDUSTRIAL NATIONAL SCHOOL, County Tipperary, by HENRY P. CLARKE, Esq., District Inspector.

Limerick, April, 1853.

GENTLEMEN,—A Report on the industrial department of the Tipperary Female National School, for the year 1851, was given by Dr. Clarke (see Eighteenth Report of the Commissioners, Vol. I., page 792); and it is now gratifying to me to be able to acquaint you that its condition has been rather improved during the past year (1852), for, whilst in the former year the average attendance appears to have been but 26, it has increased during the latter to 33, although

the highest number on the Roll has declined from 68 to 55, thus showing much greater regularity in attending by the pupils.

The aid given by the Board towards industrial department, independent of the salaries paid to the Literary Teachers, is but £8 a year, as salary to the Workmistress, who continues to give instruction in the literary school-room.

I find that the following branches have been successfully taught, samples of work in each, apparently of a very good description, having been exhibited for inspection:—Limerick lace, muslin embroidery, embroidered vests, knitting of socks and other articles in different patterns, crochet, cutting-out and making shirts, children's dresses, &c.; braided work, slippers, the soles made in a peculiar manner of closely knitted cord, with other sorts difficult to describe.

The accounts of attendance have been regularly kept, as also an account of the sums paid in wages to the pupils. The entire amount earned by them during the year was £34 6*s.* 7½*d.*, giving about £1 to each for that time, the average attendance being 33. Although this is a very small sum, being less than one penny a day, yet it is not to be taken as evidence of a want of success, for a very great part of the time of the pupils, perhaps the greater part was occupied in learning the different branches, and acquiring by practice the skill necessary for executing work of a profitable description. Very many earn nothing as yet, but of every 10 of those who receive wages, 4 earn 2*s.* 6*d.* per week; 3 earn 2*s.* per week; 3 earn 8*d.* per week. The materials, &c. have been supplied by a lady (Mrs. Ryan), resident in the town; Mrs. Ryan, assisted by a committee who take an active interest in the success of the instruction given, frequently visiting the school and superintending and directing the instruction of the pupils. Whatever success in dustrial training has here attained must be mainly attributed to their exertions. Orders for the work have been obtained by them from private persons and from shopkeepers, and some work has been exported. It is to be remarked that, in addition to instructing those who give their whole attention to the industrial department, the Teacher has taught the pupils of the Literary School the various sorts of ordinary needlework for a portion of each day, and these are of a class who do not require to make sale of their work.

Of the 33 who give their whole time to work, one-third, I am informed, can read and write, the remaining two-thirds being able to read only, and that, in all probability, very imperfectly, for they do not wish to be examined. I do not think that this can be remedied, at least under present arrangements, for, on suggesting that the workers should receive literary instruction for an hour daily, I was informed that if this were enforced, the pupils, who are grown girls, averaging over 16 years of age, would absent themselves altogether. Nevertheless, the good effected during the year

by the industrial instruction here afforded seems to me considerable, and, indeed, more than might be expected from the very small sum granted by the Board in aid of it. I regret to say, that owing to the very low remuneration granted the Teacher for her services, she is about to emigrate; and yet so small are the wages obtained by females in this country, that a well-qualified person, who has served an apprenticeship as a dress-maker, can be obtained to succeed her.

I have the honour to remain, Gentlemen, your obedient servant,

Henry P. Clarke,
District Inspector.

APPENDIX H.

Page

I.—Reports on District Model Schools, . . 71

II.—Reports on Lectures, &c., delivered in Clonmel District Model School, ... 239

III.—Head Inspectors' Reports on Schools Inspected, 259

The Commissioners have considered it desirable, that an opportunity should be afforded to the Head Inspectors of stating in their Annual Reports their views upon various matters relating to the working of the National System in their respective Districts, and, incidentally, upon the subject of elementary education in different parts of Ireland; but the Commissioners wish it to be distinctly understood, that they do not hold themselves responsible for the opinions expressed in the following Reports, nor do they feel called upon to adopt all the suggestions which they contain.

APPENDIX H.

I.—HEAD and DISTRICT INSPECTORS' REPORTS on DISTRICT MODEL SCHOOLS.

No. 1.—FOURTH ANNUAL REPORT on the CLONMEL DISTRICT MODEL SCHOOLS, by JAMES W. KAVANAGH, Esq., Head Inspector of National Schools.

Clonmel.

GENTLEMEN,—The previous Reports on the Clonmel District Model Schools which I had the honour to submit for the information of the Commissioners, contain such detailed statements of the several departments of these Schools, as to render it unnecessary that I should do more on the present occasion than report briefly on their general working during the past year.

Reference to previous Reports.

The interior and exterior of the School buildings and premises continue, as heretofore reported, unfinished, and to require both repair and extension.

Number and Attendance of Pupils.—In former Reports I mentioned that the best test of the numerical progress of a School is not the number of pupils on the roll *at* any one, nor *within* any two points of time, as both are liable to lead to very incorrect ideas. I beg leave to refer to the following Table, which will afford a comparative and correct view of the Schools from their opening, July 30th, 1849, to the close of 1852:—

Number and Attendance of Pupils.

SCHOOL.	1849 (5 months).			1850.		
	Daily Average No.			Daily Average No.		
	On Roll.	Present.	Present of 100 on Roll.	On Roll.	Present.	Present of 100 on Roll.
Boys',	87	80	92	133	114	85⅝
Girls',	76	66	87	105	91	86½
Infants',	69	51	74	92	71	77⅛
Total,	232	197	85 (av.)	330	276	83⅜ (av.)

SCHOOL.	1851.			1852.		
	Daily Average No.			Daily Average No.		
	On Roll.	Present.	Present of 100 on Roll.	On Roll.	Present.	Present of 100 on Roll.
Boys',	138	117½	85½	138	119	86⅜
Girls',	93	79	85	85	65½	77⅛
Infants',	79	61	77⅛	60	43½	72½
Total,	310	257½	83 (av.)	283	228	80 7/10 (av.)

APPENDIX H.

I. Reports on District Model Schools.

Clonmel.

In the case of the Boys' School the numbers for the entire period from its opening, exhibit a steadiness that marks the high estimation in which this department is held by the parents of the children. Apart from the influence of two private Schools for the daughters of the wealthier classes in Clonmel, and the working of two Convent Schools, which are attended by over 1,000 girls, the Female School has had, from the first, the great disadvantage of insufficient school space or accommodation; and having no class-room, the ordinary School business was interrupted in order to carry on drawing, singing, and needlework in the one room. The past winter was one of unusual severity, and as it was expected that an extension of the building would be commenced this spring, steps were not taken to repair injuries to the windows, &c., caused by the storm; and owing to this, during a portion of the winter the Girls' School-room was, from wet and cold, scarcely habitable. This lessened the attendance in that School, and the severe weather, together with the great distance of the School from the centre of the town, seriously affected the numbers in the Infants' School. On the whole, and extending over the entire period from its opening, the Clonmel Model School has maintained the highest place amongst the nine District Schools in operation; and had the Schools been extended and suitably furnished, I have no doubt the numbers in attendance would be at least double what they are at present.

By the census of 1851 the population of Clonmel, exclusive of those in the Workhouse, is 12,518; and within the past year there were under instruction in the Schools of all grades in the town, over 3,000 pupils, or one-fourth of the population; these were distributed as follow:—

In National Schools,—

	Pupils.	
3 Model Schools,	420	1,670
2 Boys' Schools, Irishtown,	400	
1 Girls' ,, ,,	650	
2 Boys' ,, Mechanics' Institute,	200	

In Denominational Schools,—

Monks' Schools,	600	1,290
Nuns' ,,	500	
Protestant Parochial,	140	
Friends' Charity,	50	

In Private Schools,—

2 Girls' Schools,	55	170
1 Friends' Boarding School,	30	
3 Boys' Classical Schools,	45	
Other Schools,	40	
Total,		3,130

This exhibits a very favourable picture of the progress of education in Clonmel, at least so far as numbers are concerned; but it is to be recollected that, at an average, the entire suburban school population for a mile and a half round is herein included; and I regret to have to state, from personal observation, that at least 300 children of both sexes in the town attend no school whatever.

The numbers on the roll of the Model Schools, Sept. 30th, 1852, were:—Boys, 140; girls, 101; infants, 69; total, 310.

Social Classes and Rates of Payment.

Social Classes and Rates of Payment.—I have nothing to report under this head in addition to what has been already stated in former reports. The Schools are attended by the children of magistrates, military officers, clergymen, barristers, medical men, attorneys, aldermen, public officers, merchants, tradesmen, shopkeepers, farmers, labourers, and servants—every social rank and class in the town.

For classification of the pupils according to the parents' occupations see Appendix A.

The following Table shows the amount of School fees received from the pupils in each year since the Schools opened:—

School.	Amount of School Fees, 1849. (5 Months).	Amount of School Fees, 1850.	Amount of School Fees, 1851.	Amount of School Fees, 1852.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Boys', . .	28 0 3	77 6 1	70 2 6	72 2 7
Girls', . .	20 10 3	57 11 11	43 10 3	32 2 1
Infants', . .	11 15 6	32 14 0	19 12 1	15 11 1
Total, .	60 6 0	167 12 0	133 4 10	119 15 9

Both as to positive and relative amount, this Table exhibits by far the highest sum paid for tuition in any Model, or other School, under the Commissioners, being at the rate, on an average of three years, of £140 a year for the elementary education of 308 pupils, 80 of whom are infants; or, excluding the latter, upwards of ten shillings per year for the tuition of each child on the rolls in the Boys' and Girls' Schools. In 1850, the proportions of pupils paying the three School rates were revised by me, and the numbers which paid the higher rates then reduced to a scale which has not since been exceeded—11 at a penny per week to 9 at 2*s.* 6*d.* per quarter, and 8 at 5*s.* per quarter. The amount of School fees in 1852 is nearly equal, in proportion to the attendance, to what it was in 1851.

Religious Denominations and Religious Instruction.

Religious Denominations and Religious Instruction.—The same union of all the creeds in the town (except the Friends, who have no poor, and who have opened a Boarding School for their daughters), continues, as before reported, in the three branches of the Model School. The following Table shows the

APPENDIX H.

I. Reports on District Model Schools.

Clonmel.

number of pupils on the rolls, of each persuasion, on the 30th September in each year since the opening of the School:—

Religious Denominations.	No. of Pupils on Rolls, September 30th,				Total No. Admitted from July 30th, 1849, to Dec. 31, 1852.
	1849.	1850.	1851.	1852.	
Roman Catholics, .	192	254	205	212	870
Established Church,	39	75	69	68	145
Presbyterians, Synod of Ulster, . .	3	14	6	11	15
Presbyterians, Unitarians, . .	6	9	8	9	13
Christian Brethren,	3	3	5	3	13
Separatists and Wesleyans, .	0	5	2	2	5
Other Creeds, .	0	2	2	5	5
Total, .	243	362	297	310	1,066

It is only to those who possess considerable knowledge of Clonmel and its vicinity, and also when viewed in connexion with the Table of occupations of parents, that these returns can exhibit their full importance. Happily in all the District Model Schools there is a mixture of children of various social grades and of different religious persuasions; in none, however, is this union so varied in its elements, local circumstances considered, as in the Schools in Clonmel.

The arrangements for the separate religious instruction of the children by their respective clergymen, or by the Teachers and Assistants acting under their direction, have continued the same from the opening of the Schools in July, 1849; and the clergymen who attend report most favourably of the progress of their respective classes, and of the good conduct and attention of the children during the times of religious instruction. The children of the Established Church are instructed in the Scriptures from 10 to 10½ o'clock on four mornings in the week, as are also all the other Protestant children, and these classes are superintended by two Protestant Teachers and four Pupil-Teachers and Paid Monitresses; and during the same hour, and in separate rooms, two Roman Catholic Teachers and 12 Pupil-Teachers and Paid Monitresses instruct the children of their own church. On Fridays, from 10 to 11 o'clock, Rev. Mr. Palliser, Protestant Rector; Rev. Mr. Baldwin, Parish Priest, and his two Curates; Rev. Mr. Dill, Presbyterian Minister; and Rev. Mr. Orr, Unitarian Minister, attend to examine and instruct the pupils of their several denominations.

Literary Instruction—Boys' School.

Literary Instruction—Boys' School.—In my Reports on the Schools for 1850 and 1851, I gave so full an outline of the course of instruction, that I deem it quite unnecessary to enter on the subject again; there are special branches, however, to

which I shall hereafter call attention. See classification and ages of pupils, Appendix B, C.

Clonmel.

I visited the Schools, and partially examined in each many times during the past year. The private examination held for six days, immediately before the public examination in July last, afforded me the best opportunity of ascertaining the pupils' progress during the previous year. In most of the subjects, as arithmetic, book-keeping, mensuration, algebra, geometry, grammar, spelling and derivation, dictation, lesson books, geography, the principles of vocal music and of drawing, and in the various branches included in Dr. Clarke's Lessons in the Physical and Applied Sciences, written questions were prepared by me (except in Dr. Clarke's class, and in music and drawing); these were put to the several classes, and the premiums awarded on the results. All the classes read to Dr. Clarke or to me, except in a few cases where some of the most distinguished in a class were put before us, after examination by the Teachers, in order to ascertain the pupil of highest merit.

I had reason to feel satisfied on the whole result of the examination, that fair progress had been made in the previous year, and that the Teachers of the Boys' School had, one and all, done their duty. The subjects to which I deem it necessary to advert, as still open to further attention, with a view to greater improvement, are—reading, writing from dictation, the higher branches of commercial arithmetic—as the public funds, exchange, insurances, &c.; practical geometry and the more frequent use of scales, &c.; a constant reference to the cardinal points as actually drawn on the School floor; and to other such lines practically drawn, with a view to thorough teaching in mathematical geography; use of the globes, and working out the numerous problems which can be solved by them; in drawing, more attention to be given to the principles of perspective, and the mechanical and other models of that class to be set before the pupils at an earlier stage, in preference to all other objects.

Girls' School.—To the extent of the subjects taught, the progress of the pupils has, in general, been rather more marked in this than in the Boys' School; and in this respect the result of both the private examination, and of frequent partial examinations, during the year, was the same as stated in former Reports. In reading and in penmanship the excellence is such as to leave room for little further to be desired. Spelling from dictation receives increased attention—the senior class shows an excellent knowledge of derivation; however, under this head English for Saxon derivation requires urther care, but elementary mathematical geography is taught with great success. The branches in which the progress was not so marked, and to which the Teacher's attention was specially directed, are—grammar in the junior classes; local geography, and both written and mental arithmetic in all the classes.

Girls' School.

Towards the close of the year, the Workmistress resigned

APPENDIX H.

I. Reports on District Model Schools.

Clonmel.

her situation in consequence of the smallness of the salary allowed her, and no successor has since been appointed. The industrial instruction of the girls is, however, satisfactorily conducted by the Head Mistress and her Monitresses, and the variety and excellence of the several kinds of plain and fancy work, knitting, netting, and crochet, are highly creditable.

Infants' School.

Infants' School.—At the end of September, Miss Bryant, who had from its opening been Teacher of this School, was transferred to a similar situation in the Coleraine District Model School. She was an excellent Teacher, and the parents and pupils regretted her removal. Miss Craig, one of the assistants, and who had been trained, in the Central Infants' School in Dublin, succeeded Miss Bryant; but her career was brief, as in four months she was suddenly carried away by a few days' illness. We knew her long enough to witness the promise of an excellent Teacher, and with such high qualities of mind and of disposition as endeared her to every one connected with the Schools.

The change of Teachers, the extreme severity of the past winter, and the remoteness of the School from the centre of the town, seriously affected the attendance during the latter part of the year in the Infants' School. To prevent inconvenience under the first of these heads, I have recommended the appointment of a second, or Assistant, Teacher in the Girls' School, who would act as Workmistress, assist in the literary instruction of the girls, and, in the event of the illness, &c., of the Teacher of either the Girls' or of the Infants' School, would take her place, and thus prevent interruption to the business of the establishment.

The management and efficiency of the Infants' School were, all circumstances considered, satisfactory during the past year.

Singing.

Singing.—When Mr. Washington, who introduced Hullah's System of Vocal Music into the Schools, was removed to another Model School, Mr. Corbett, Second Master, continued to conduct the singing classes in the Boys' and in the Girls' Schools, and with considerable success. In November, Mr. Corbett resigned his situation, on his appointment to a National School in the city of Waterford, at a salary of £70 per annum; and since his retirement the singing in the Boys' School has not been sustained, either in character or in effect. In the Girls' School it continues to be kept up with spirit and success, as some of the Monitresses are fully competent to sustain it. The singing in the Infants' School is also conducted satisfactorily.

Drawing.

Drawing.—Mr. Brophy has had to give instruction in drawing under the great disadvantage of badly-lighted rooms, neither of which contained any of the proper fittings or furniture necessary for his subject. Apart from this defect, the use of chalks, and the removing of stands, models, &c., in the one small *School*-room for each sex, produce not only a want of order, but also a want of cleanliness in the rooms.

I am of opinion, that both of his classes—boys and girls—

have made creditable progress in drawing, considering the age of the pupils, the short time devoted to the subject, and the circumstances under which the instruction was given. The girls show great taste, but it manifests itself almost wholly in *copying*—the specimens in this branch executed by some of them being very superior. For the principles and practice of perspective, drawing from models, or for elementary mechanical drawing, they have not as yet shown a taste to the extent which I would desire. Some of the boys have produced admirable drawings from the class models, from steam-engines, and from various elements of machinery. They have also prepared, under Dr. Clarke's direction, an extensive set of illustrations, on a large scale, of the outlines of Animal Physiology, and of large diagrams adapted to his lectures on the several branches of Natural Philosophy, and on the scientific principles connected with various departments of the arts and manufactures.

Besides the indispensable requirements of a suitable room, some good casts, a greater variety of models, and also of good drawings, and the introduction of easy lessons on colour, would be necessary in order to give increased efficiency to this branch of instruction.

Short as it is since the establishment of Schools of Design in England, and still more recently in Ireland, experience has already taught the heads of those institutions, that until drawing is made an *essential* portion of instruction in the common elementary schools, the Schools of Design can but imperfectly fulfil their mission. This has been put forward in all the recent Reports, &c., connected with this department; and in proposing to the Committee of Council on Education to connect the elementary schools in England with the Schools of Design, the Board of Trade states: "It has, in fact, been necessary to fill the Schools (of Design) in the first instance, with elementary pupils; and even to the present time, the impossibility of obtaining pupils, with any preparation for the studies which constitute the proper object of the Schools of Design, continues to impress upon them too much of an elementary character, and to cause an undue occupation of the time and attention of the teachers." This result would be seen at a glance on visiting the School of Design, Somerset House, London, the Dublin or Cork Schools, or the recently established Drawing School in Waterford, all of which I visited during the past year. Nor will the establishment of *Intermediate* Schools, as those in Waterford and Limerick, under the name of Elementary Schools of Drawing and Practical Art, tend to materially lessen this evil, which can be effectually met only by beginning *below* and working *upwards*, —by the general introduction into all, or most, of the common Day Schools of some knowledge of drawing. There are, in Ireland, forty-eight towns, each having a population of over 5,000 persons, and fifteen of these have a population of over 10,000 each; and if in each of these towns there was a good

APPENDIX H.

I. Reports on District Model Schools.

Clonmel.

Elementary Drawing Class, as a branch of the National School, the grounds of complaints of the Board of Trade would soon be removed. Through the Central Model School, and through District Model Schools, as in Clonmel, this desirable end can be obtained, by qualifying such young persons as show aptitude and talent for drawing, and are Candidate Teachers, so that when they get charge of ordinary Schools, they may be able to give instruction in drawing as a portion of the daily business of their Schools.*

During the past winter, Mr. Croome, Head Master of the Waterford Elementary School of Drawing, under the Board of Trade, visited Clonmel; and I feel very happy in being able to report to the Commissioners, that on his return to Waterford, he stated, at a public meeting of the citizens, that the drawing of the pupils in Mr. Brophy's classes was excellent, and the system of teaching worthy of adoption in schools of higher pretensions.

Physical and Applied Science. Dr. Clarke's Class.

Physical and Applied Science.—Dr. Clarke's Class.—The Appendix to the Eighteenth Report of the Commissioners (vol. i., page 179), contains so full and clear a statement, by Dr. Clarke, of the nature and object of his instruction to the senior boys and to the Pupil-Teachers in Natural Philosophy and Chemistry applied to the Arts, that I shall refer to his Report, and to the examination papers which follow it, as affording entire information on this department of the School. The examination papers embrace seventeen subjects on Physical Science, and on the scientific principles of various branches of mechanism and of manufacture; and of the aggregate 256 questions, all were correctly answered by some of the class. During the past year, Dr. Clarke has added Comparative and Human Physiology† to the subjects previously taught; and already the Pupil-Teachers and senior boys have made considerable progress in these most useful and interesting branches of instruction.

The census of 1851 shows that there are, in Ireland, 139 towns, with a population of upwards of 2,000 each, or an aggregate of about 1,150,000 persons. Here is over one-sixth of the entire population, the majority of whom derive their support from occupations which minister to the production of food, clothing, and habitations—in fact, operatives, success in whose respective crafts mainly depends upon their understanding, and being able to apply, the scientific principles on which the processes involved in them depend. For the special instruction of these classes, the National System has, as yet, made little or no provision. The training session in Dublin is so short, and the Teachers enter with such inferior attainments in the elementary branches, that few leave the training

* Drawing materials, including models, stands, crayons, paper, cases of mathematical instruments, boxes of colours, &c., if sold by the Board at moderate rates, would greatly encourage the introduction of drawing into the National Schools.

† See Examination Papers on these subjects, page 244.

department with any thing beyond the merest smattering of mechanics, natural philosophy, or chemistry. This is a great deficiency, and to remedy which requires an extension of the period of training, the publication of cheap elementary treatises on various branches of physical and of applied science, a supply to each School, under a Teacher of superior merit, of such simple apparatus, models, and diagrams as would be required to illustrate the subjects of these treatises, and lastly, that while in training, the Teachers should not merely attend the lectures, and be examined thereon, but also, that they should be practised in manipulation, in the use of the elementary apparatus referred to, and have their ability in teaching and illustrating the subjects to a class of boys frequently tested.

In all the chief training colleges and schools in England, instruction is given in mechanical and physical science to the students, and in some instances, to the boys in the Practising or Model Schools attached to the training departments. Kneller Hall Training School, near Twickenham, is specially intended for the training of schoolmasters for workhouses, prisons, and other Government departments; and on visiting it in September last, I was present while one of the young Candidate Teachers gave a lesson on the Elements of Chemistry to a small class of boys, whose average age did not exceed ten years. This was given in the presence of Mr. Tate, who is the Mathematical and Physical Teacher, and of the young man's fellow-students; and in skilful manipulation, clearness and simplicity of delivery, and aptitude to the class, the young man's success was very decided. There is a very extensive and well-appointed laboratory in Kneller Hall; and I have referred to the instruction here, merely for the purpose of showing, that, in England, physical science, illustrated by experiments, forms an integral portion of the course of training for those who are to teach even the lowest order in the social body—the children of poverty and of crime. But to teach well the rudiments of science, one must know much more than its rudiments. "The dove would not have brought the olive branch to the ark of man's hopes, unless she had been able to take a higher and longer flight than that embraced in the tree whence she came."*

Statesmen, philosophers, all the great minds of the age, cry out to give secular education a practical drift. In Sir J. P. Kay Shuttleworth's recently published work, on "Public Education," he says,† "There are also objects of a purely economical and commercial nature essential to the material prosperity of the country, of which the religious communions are not discriminating judges, and in which a necessity arises for the interference of the civil power. Among these may be enumerated the expedients for the cultivation of industrial art, of such mechanical and physical instruction as are indispensable to the highest degree of success in our manufactures, of a

* Dr. Lyon Playfair. † Page 291.

familiarity with the domestic and social circumstances conducive to health, of a knowledge of the laws affecting the humbler classes, and the simple principles affecting the accumulation and distribution of wealth. Even the text-books for such instruction do not, at present, in some cases exist. The department of Practical Art, (Board of Trade), will, in co-operation with the Committee of Council, (on Education), soon convert the training schools into a successful machinery, for the elevation of the taste of the great masses of the people." This instruction, so necessary, desirable, and feasible in England, is yet more wanted in Ireland; and what has been done in Clonmel should be attempted as a beginning in all the Model Schools in large towns, as Galway, Newry, Waterford; and in those in the smaller towns, as Dunmanway, Bailieborough, and Trim, this instruction to partake rather of an agricultural character.

At the suggestion of His Royal Highness Prince Albert, a course of twenty-four lectures on the results of the Great Exhibition of 1851 was delivered before the Society of Arts and Manufactures, of which His Royal Highness is the President; and these lectures, delivered by some of the ablest and most eminent men in the empire, are now published, inscribed with a dedication by the Council of the Society, to Her Majesty the Queen. In these lectures the theme which all have mainly dwelt on, is the necessity for industrial instruction in art and in science; instruction, not merely in colleges and for adults, but for juveniles in the elementary schools through the empire. Dr. Lyon Playfair says,* "The published opinions of Babbage and Herschell—men who have a right to pronounce judgment on this subject—assure us that England is rapidly declining in science. The raw material, formerly our capital advantage over other nations, is gradually being equalized in price, and made available to all, by the improvements in locomotion; and industry must in future be supported, not by competition of local advantages, but by a competition of intellect. All European nations, except England†, have recognised this fact—their thinking men have proclaimed it—their governments have adopted it as a principle of state—and,

* Lectures on the Results of the Great Exhibition of 1851, vol. I. lec. v.

† Since the delivery of this lecture the speech from the throne at the opening of the present session of Parliament redeems the character of the nation from this charge.—"The advancement of the fine arts, and of practical science, will be readily recognized by you as worthy the attention of a great and enlightened nation. I have directed that a comprehensive scheme shall be laid before you, having in view the promotion of these objects, towards which I invite your aid and co-operation." Adopting the views put forth in Her Majesty's speech, the Board of Trade in an explanatory letter (dated March 16th, 1853) to the Lords of the Treasury, applying for a grant of £39,181 to carry out these objects, asserts, "My Lords can have no hesitation in stating that the time has now arrived when the consideration of the important question of supplying scientific and artistic instruction to the industrial classes of this country in a more systematic manner than has hitherto been possible, can no longer be postponed."

every town has now its schools, in which are taught the scientific principles involved in manufactures, while each metropolis rejoices in an Industrial University, teaching how to use the alphabet of science, in reading manufactures aright. Were there any effects observed in the Exhibition from this intellectual training of their industrial populations? The official reserve, necessarily imposed upon me, as the Commissioner appointed to aid the juries, need exist no longer; and, from my personal conviction, I answer, without qualification, in the affirmative. The result of the Exhibition was one that England may well be startled at. Wherever—and that implies in almost every manufacture—science or art was involved as an element of progress, we saw, as an inevitable law, that the nation which most cultivated them was in the ascendant, All the visitors, both foreign and British, were agreed upon one point, that, whichever might be the first of the exhibiting nations, regarding which there were many opinions, that certainly our great rival, France, was the second. Let us hope that in this there is no historical parallel. After the battle of Salamis, the generals, though claiming for each other the first consideration as to generalship, unanimously admitted, that Themistocles deserved the second; and the world, ever since, as Smith remarks, has accepted this as a proof that Themistocles was, beyond all question, the first general. A competition in industry must, in an advanced stage of civilization, be a competition of intellect." Again, he says, "The reason of this deficiency is not the absence of public philanthropy or want of private zeal for education, *but chiefly rests in that education being utterly unsuited to the wants of the age.* If classical literature be sufficient to construct your spinning-jennies and bleach your cottons, your system of instruction is right; but, if you are to be braced, and your sinews strengthened for a hard struggle of industry, is it wise that you should devour poetry, while your competitors eat that which forms the muscles, and gives vigour to the sinews? With such different trainings, who in the end will win the race? I am propounding no scheme of *education*, but strongly insisting that *instruction in science should form an important part in the education of our youth.* Do not conceal from yourselves that this is the vital difficulty of the question. You may, and I hope, will, soon raise an Industrial University;* but this should have its pupils ready trained before it adopts them. Now, it must act from itself, downwards, *instead of acting from the schools, upwards.* Until our schools accept as a living faith that a study of God's works is more fitted to increase the resources of the nation than a study of the amours of Jupiter or of Venus, our Industrial Colleges will make no material headway against those of the Continent. Government, acting on its own perception of right, in its first national recognition

* The building is now in course of erection opposite the site of the Crystal Palace, the surplus funds from which were handed over to to defray the cost of its erection.

of these truths, now happily dawning on England, has established a School of Mines; and the experience of this has shown that it is much appreciated, although it labours under the disadvantage of the want of a preliminary education in its pupils, compelling its professors, in its commencement, to be more elementary in their instruction than is well compatible with the proper objects of such a school." All the distinguished men who lectured—Whewell, De La Beche, Owen, Lindley, Cole, Glaisher—put forward the same view which Playfair so eloquently advocated, that the wealth and material prosperity of a country depend directly upon the care bestowed on the cultivation of science and art.

This necessity for industrial instruction in Ireland is so manifest—and the awakening energies of the country so peculiarly point out the present as an opportune time to further extend it in the Commissioners' Schools—that, I trust what has been already effected in Clonmel, will encourage them to introduce scientific instruction of this kind into all their Model Schools in large towns. Without chemistry there can be no progress in agriculture; without mechanics there is neither machinery nor manufactures; without drawing there is neither design nor architecture; without navigation and astronomy there can be no commerce.

Instruction in Classics.

Instruction in Classics.—During the past year a memorial was presented to the Commissioners by a deputation from the parents of the children, requesting that opportunity might be afforded to such as desired, and as were willing to pay increased school fees, to have their children instructed in a course of Latin, Greek, and French, so as to qualify them for entrance in the colleges and collegiate institutions in Ireland. From the rank in life to which many of the pupils belong, several are likely to become professional men, and to these a knowledge of classics is a matter of necessity; whilst to all, the study of a second language, besides its influence as a mental discipline, would not merely make them better understand the peculiar genius of their own, but would lead them to the literature of which the dead or living language is the vehicle. In science, knowledge is power; in literature it may be said with equal truth that knowledge is pleasure. One effect which the absence of instruction in classics is sure to produce on the School, is to have numbers of boys withdrawn from it at the age of ten or eleven years, in order to go elsewhere and enter on the study of Latin and Greek. In almost all the English Training Colleges and Schools for Masters, the Candidate Teachers are taught a second language; in St. Mark's, Chelsea, Latin, Greek, and French; in York and Ripon, Latin and Greek; in Cheltenham, Latin; and, in Battersea, Chester, and Durham, the students are taught French. Notwithstanding this practice in England, there appear to be many persons in Ireland who doubt the propriety of giving our Pupil-Teachers in the District Model Schools, and our Masters in the Central Training Institution, the important advantage of a knowledge

of Latin and Greek; some fearing that its expense would be a misapplication of the public funds, although the state itself mainly supports the English Training Schools just mentioned, and the scheme is received unfavourably by other persons on grounds of a different character. All the friends to the National system in and about Clonmel—the clergy of all denominations, the landlords and gentry, and the professional and mercantile classes—unanimously urge the necessity there exists for the addition of a classical branch to the School; and I beg to state that I cordially concur in that opinion.

Public Examinations.

Public Examinations.—The Annual Public Examination of the Schools, as required by the regulations of the Commissioners, was held on the 21st and 22nd of July, and as on previous years, was most numerously attended by a large concourse of ladies, and by the clergy, gentry, and the parents of the children. The Boys' School was examined on the first day—reading, geography, grammar, writing, arithmetic, mensuration, geometry, book-keeping, and elementary astronomy being the chief subjects. Their drawings, both from the flat and the round, were also inspected, and the Drawing Master examined a class on the principles of perspective. The maps of surveys made by the Pupil-Teachers, and drawn by them and by the boys, were also exhibited; as also the admirable diagrams prepared by them under Dr. Clarke's direction, to illustrate his lectures on the several branches of natural philosophy and manufactures. Dr. Clarke examined the senior class on the electric telegraph, a working model of which was in the School, on geology, agricultural chemistry, several branches of manufacture, and on the steam-engine. On a portion of the second day the girls were examined in reading, grammar, derivation, geography, and mental arithmetic; their penmanship was inspected in their copy-books, as were also their drawings, both copies and from models, the excellence of some of which was greatly admired. On the second day, also, the infants recited some pieces of poetry, and were examined on the rudiments of geography. During the two days in each of the Schools, the former Singing Master, who came specially to attend the examination, directed the pupils, who occasionally sung some of their best songs and airs, and which contributed to enliven the proceedings.

Premiums.

Premiums.—At the close of the examinations on the second day, the visitors and the pupils assembled in one of the playgrounds, none of the rooms being equal to the accommodation of even the visitors; and premiums of books, work-boxes, &c., were presented by the clergymen to the pupils who had most distinguished themselves in their classes at the private examination of the Schools held during the previous week. These books, &c. amounted to £10, and with each, besides the lable within, there was presented to the pupil a parchment certificate, signed by the Inspectors, which set forth the title of the premiums, and the subjects in which it was obtained. In

APPENDIX II.

1. Reports on District Model Schools.

Clonmel.

addition to these premiums, seven of the boys * of the highest merit were taken the next week, chiefly at the expense of the Right Hon. Alexander Macdonnell, Resident Commissioner, to see the Cork Industrial Exhibition, and the particulars of which visit will be hereafter stated.

After the presentation of the premiums, the audience resolved itself into a Meeting and passed unanimously the following resolutions, Lieutenant-Colonel Phipps, J.P., Oaklands, in the Chair :—

Proposed by Rev. Mr. Baldwin, P.P. :—1. That we, the parents of the children and visitors attending the Public Examination of the pupils in the Clonmel Model Schools, avail ourselves of this opportunity to express our heartfelt satisfaction with the progress of the pupils; our gratitude for the indefatigable exertions of the various officers in charge—Inspectors, Teachers, and Assistants—and our approbation of the manner in which these Schools have been conducted, where children of all creeds associate in perfect harmony while acquiring knowledge, and to which the clergy of all denominations lend their valuable countenance and support.

Proposed by Rev. Mr. Dill, Presbyterian Minister :—2. That we regret exceedingly that the Commissioners of National Education have not as yet extended these buildings so as to give the expected and needful accommodation for the efficient working of these Schools; and we trust that when their attention has been thus directed to it by the friends and supporters of the establishment, they will lose no time in adapting them to the great and important object for which they were designed, making them fully adequate to the present and future wants of this commercial community.

Proposed by Rev. Mr. Orr, Unitarian Minister :—3. That we, the parents of the children attending these Schools, feel deeply indebted to Dr. Clarke, especially for his voluntary and untiring exertions in instructing the more advanced pupils in the principles of the arts and of applied science, showing their practical adaptation to various branches of manufactures—a most important advantage, as we are most happy and grateful to record, which these Schools possess above all similar institutions in this country.

On the motion of Dr. Flynn, Col. Phipps was moved from the chair, and the Hon. George S. Gough, D.L., J.P., Rathronan, moved thereto; when the thanks of the meeting was voted to Col. Phipps for presiding, and for the deep interest he has always taken in the success of the institution.

It would not become me to attempt, by any remarks of mine, to add importance to these resolutions beyond what their mere statement must command; I shall therefore merely mention that the Rector, Rev. Mr. Palliser, would have been present had not urgent business called him away to the County Waterford, and these resolutions are in entire accordance with his opinions. Lady Osborne, who on each previous

* Appendix D. shows their names.

year had honoured us by her presence, intended to do so on this occasion also; but the crowded streets, caused by the excitement of the election in Clonmel, was sufficient to deter her ladyship from coming into town.

Clonmel.

After the proceedings of the meeting had closed, the entire Schools sang in the open play-ground some appropriate airs, and after "God save the Queen," the pupils were informed that their vacation, to last a fortnight, had commenced.

Visitors.

Visitors.—During the past year the number and rank of visitors to the Schools were similar to those reported for 1851. We had the honour of visits from two of the Commissioners; from His Grace the Archbishop of Dublin, July 1st; and from the Very Rev. Dean Meyler, D.D., November 8th. Understanding from His Grace the Archbishop of Dublin, whom I had the honour to meet in the Cork Industrial Exhibition, that he was going to Clonmel, I proceeded there with the approbation of His Grace, and attended at the Model Schools, July 1st, when the Archbishop, Lady Osborne, Mrs. Osborne, and party visited. His Grace inspected the building within and without, and went through the several departments of the establishment. Classes were examined in the three Schools at the request of the Archbishop, and His Grace took part in questioning on several of the subjects. Dr. Clarke examined the senior boys on various branches of natural philosophy, and His Grace expressed himself much surprised at the nature and extent of their attainments. The Archbishop and party remained for about three to four hours, during which time examinations of the pupils in the various branches were gone into, the subject in most instances having been first selected by His Grace, who, before his departure for Newtown Anner, was pleased to leave the following entry in the Visitors' Book:—

"1st July, 1852.

"Examined the Schools very fully, and was highly gratified with all I saw. There is a great want of enlargement.

(Signed) "RICHD. DUBLIN."

I was so fortunate as to be in the Schools Nov. 8th, when the Very Rev. Dean Meyler honoured them by his first visit. He made minute inquiries as to their working in several respects, as the Archbishop of Dublin had also done, and expressed himself greatly pleased with all he saw and heard about them. Rev. Mr. Baldwin, P.P., was present during the visitation of the Archbishop of Dublin, and Rev. Mr. Orr was present during Dean Meyler's visitation.

Apart from this high testimony to the efficiency of these Schools, as given by two of the Commissioners from examination and local report, and from the important testimony of the clergy, gentry, and parents of the children, as conveyed in the resolutions above quoted, I beg leave to submit, from amongst a number of reports of similar character, two from gentlemen whose opinions deserve especial notice.

APPENDIX H.

I. Reports on District Model Schools.

Clonmel.

December 23rd, or the day on which the Schools were about to close for vacation, and on this account several in the advanced classes absent, G. F. Shaw, Esq., Fellow of Trinity College, and Professor of Natural Philosophy, Queen's College, Cork, visited the Schools. Professor Shaw and I examined several classes in the Boys' School; I examined classes in the Girls' School, and Dr. Clarke examined his own class in various branches of physical science and in animal physiology; the entire examination lasted four hours. I beg leave to submit Professor Shaw's report:—

"I have examined the pupils from 11, a.m., to 2½ o'clock, p.m., in mathematics, astronomy, and physics, and listened to Dr. Clarke examining them in chemistry, geology, and industrial applications of science. I have come to the conclusion that the education of the upper and middle classes is immeasurably behind that to be had here.

(Signed) "GEORGE F. SHAW.

"December 23, 1852."

Amongst other points in the Schools that particularly called forth Professor Shaw's surprise and commendation was the excellent answering of the girls in mathematical and physical geography and in the elements of astronomy.

A few weeks after, Dr. M'Knight visited the Schools, and heard them examined in various branches of study. His report speaks for itself:—

"I have this day had the privilege of visiting all the departments of this School, and I have witnessed with pleasure and surprise the proficiency of the pupils, especially in branches of knowledge with which I could scarcely have supposed them acquainted. The Teachers appear to have been very efficient in the discharge of their duties, and to have made this institution a *Model* School in the highest sense of the term. The labours of Dr. Clarke are beyond all ordinary commendation.

(Signed) "JAMES M'KNIGHT, LL.D.

"January 17, 1853."

Amongst recent visits to the Schools, I may mention that of the Judges going circuit—the Right Hon. the Lord Chief Baron Pigot and the Hon. Judge Crampton.

Cork Industrial Exhibition.

Cork Industrial Exhibition.—The Commissioners were pleased to afford, at the public expense, a most agreeable and instructive trip to the Cork Exhibition to the Teachers and Pupil-Teachers, &c., in the Clonmel and the Dunmanway Model Schools. The party consisted of four Teachers, eight Pupil-Teachers, and eight pupils, from Clonmel; two Teachers, the Agriculturist, and eight Pupil-Teachers and agricultural boarders from Dunmanway, and the Agriculturist from Glandore Model Farm. The Dunmanway party went to Cork under Mr. Simpson's charge, and the Clonmel party under Dr. Clarke's and mine, both meeting at the Exhibition in

Cork at 10 o'clock on the morning of the 26th July. Eight hours were spent that day in examining the several departments of the Exhibition; Dr. Clarke and I explaining to the party the principle and application of such branches of machinery, arts, or manufactures, as were not sufficiently intelligible to them. Next day we proceeded by steamer to Queenstown, to witness the Royal Regatta; and in addition to this exciting scene, attended by thousands on land and water, we visited the armoury at Haulbowline, Spike Island, and the Admiral's Flag-ship *Ajax*, where, through the kindness of the officers, we were enabled on board to point out to numbers, who probably might not again have similar opportunity, the several interesting aspects of naval life. The third day the two parties returned to their respective stations, having first seen the several public institutions in the city—the Queen's College, Cork Institution, School of Design, &c. When it is considered how well prepared, from Dr. Clarke's instruction, the majority of these young people were in order to derive full benefit from such an Exhibition of Industry, the advantages which must arise from this treat, so kindly afforded by the Commissioners, can readily be understood.

During my vacation in 1851, I spent most part of it in the Great Exhibition of Industry; and to me one of its most striking features was the advantage taken of it as a *Great School*,* as through it might be seen passing daily the pupils of Schools from every part of England brought in hundreds of miles on special trips, and headed by their Clergymen, Committees, and Teachers, who guided them in compact bodies through the vast range of the Crystal Palace. In visiting some of the Schools in London with the Rev. H. Moseley and Rev. F. C. Cook, her Majesty's Inspectors, I made it a point to inquire to what extent the Great Exhibition had been thus made available, and amongst many thousand pupils I scarcely found a child who could not state some of the impressions made on it by its visit to the Exhibition. Rev. Mr. Cook made the objects seen in the Exhibition the subject of exercises for the pupils in composition, power of observation, &c., and the written statements of children of ten years of age were remarkably clever and interesting. I have alluded to this subject, suggested as it was in reporting the trip to Cork, and with a view of calling attention to the

* Dr. Whewell, Trinity College, Cambridge, concludes his lecture thus:—"To what University have the students of the useful and the beautiful arts been resorting during the past term? To a University of which the Colleges are all the great workshops and workyards, the schools and societies of arts, manufactures, and commerce, of mining and building, of inventing and executing, in every land—Colleges in which great chemists, great mechanists, great naturalists, great inventors, are already working, in a professional manner, to aid and develop all that capital, skill, and enterprise can do. Coming from such Colleges to the central University, may we not well look upon it as a great epoch in the life of the material arts,

great opportunity now at hand of bringing up to Dublin the Teachers and Pupil-Teachers in the nine District Model Schools to see the Great Irish Exhibition of Industry. Not the least amongst the good fruits of such a meeting would be the formation of mutual friendships amongst those connected with these important institutions, and which could not fail to exercise deep influence upon the well-being of all of them.

The expense of the pupils taken from Clonmel was defrayed by the Right Hon. A. Macdonnell; and to him and to the other Commissioners the Teachers, the Pupil-Teachers, the pupils, and their parents, feel deeply grateful for the very agreeable and highly instructive treat afforded to them; and nothing could more practically testify this feeling on the part of all of the former than the excellence of their conduct while in Cork.

The Training Branch. Pupil-Teachers.

The Training Branch—Pupil-Teachers.—In the Appendix (E) will be found a list of all the Pupil-Teachers admitted since the opening of the Schools, with the dates of their admission, their ages at entrance, their religious persuasion, the dates of their leaving, their subsequent occupation, and their classification, Of the 25 admitted, all had been pupils in National Schools, five of them had acted as Paid Monitors, three as Paid Second Masters, and two as unpaid, and one had charge of a National School. Of the 25, seven had been pupils in the Model School itself. Five were of the Established Church, one a Presbyterian, and 19 Roman Catholics. Of the 21 trained, one emigrated with his father, two are clerks in a bank in Clonmel, one is Teacher in a College in England, three are on the special class in Dublin, the remaining 14 are in National Schools, one of them as assistant, three in Model Schools under the Commissioners, and ten are in charge of important National Schools. Of the 25, ten have been since trained in Dublin, and of these six obtained places in the special class, from which three of them were sent out to superior situations; and the Pupil-Teacher whose year in Clonmel is expired, is also recommended for next vacancy in the special class in the Central Training Establishment. To the Managers of the Schools, &c., in which they have been engaged, to the Professors in Dublin, and to the Inspectors, these young men have given the highest satisfaction; and ten of the 21 having obtained respectable situations in Clonmel, where they were trained, or in its vicinity, is the best practical test of the estimation in which their moral conduct and their superior qualifications are held

that they have thus begun their University career? May we not expect that from this time the eminent producers and manufacturers, artizans and artists, in every department of art in every land, will entertain for each other an increased share of regard and good-will, of sympathy in the great objects which man's office as producer and manufacturer, artizan and artist, places before him—of respect for each other's characters, and for the common opinion of their body, all increased by their being able to say, 'We were students together at the Great University of 1851?'"—*Lectures on the Results of the Great Exhibition.* Vol. I., lecture i.

by those who have most and best opportunity of judging of them.

Seven Candidate Male Teachers also attended the Schools at their own expense, and six of whom have since got charge of National Schools, the other as Paid Monitor.

Paid Monitresses.—The staff of eight Monitresses is kept up, and of the 15 who have been appointed since the Schools opened, 14 were pupils of the Girls' School. Of the 15, two were of the Established Church, one a Separatist, one a Presbyterian, and 11 Roman Catholics. Eight are yet in the Model Schools, and of the seven who have left, two emigrated, one assists in her father's school, one is at home assisting in domestic duties, and three are in charge of good National Schools.

Paid Monitresses.

Twelve Candidate Female Teachers (Appendix F) have attended the Model Schools, and all of them are now in charge of, or assisting in, National Schools. One has been appointed to the charge of a small Model School (Gormanstown) under the Commissioners, two to Schools under the Earl of Bessborough, two to Workhouse Schools (city of Waterford and Clonmel), one to the special class in Dublin, and thence to a factory National School, County Down, one to a National School in Ennis, three to National Schools in different counties, one is on the special class in Dublin, and the twelfth assists her brother in a National School.

In Appendix (E) will be found the names, classification, Schools, &c., of the Paid Monitresses, and of the Candidate Teachers who have left the Model School.

In accordance with arrangements made by the Commissioners, the superintendence and direction of the Clonmel Model School pass, with the Circuit District in which it is situated, from me to one of my colleagues. Before closing this Report, I beg to state that I shall ever gratefully remember the invaluable co-operation which I received, during my connexion with the Schools, from the clergymen who attend to give religious instruction, and without whose support they could never have attained such marked success. The gentry, professional and mercantile classes, and the parents of the children, have one and all assisted us; and perhaps it would be difficult to find any institution which more thoroughly represents the unanimous feeling of the locality generally than the Model School.

The Heads of the three branches of the School, their Assistants, and the Drawing-Master, merit the approbation of the Commissioners for the zeal and diligence they have shown in their respective departments.

I have the honour to remain, Gentlemen, your obedient servant,

James W. Kavanagh,

Head Inspector, National Schools.

The Secretaries,
Education Office.

APPENDIX H.

I. Reports on District Model Schools.

Clonmel.

APPENDIX A.

OCCUPATION of PARENTS of the PUPILS on SCHOOL-ROLLS, Sept. 30, 1852.

	No. of Pupils.		No. of Pupils.
Apothecary,	2	Hairdresser,	1
Attorney,	1	Labourer,	20
Barrister,	3	Land Steward,	2
Brewer,	1	Millwright,	3
Clergyman,	5	Milliner,	5
Distiller,	1	Matron of Public Institution,	2
Excise Officer,	4	Organist,	2
Medical Doctor,	1	Publican,	4
Gentleman, Government Officer,	3	Police Officer,	3
Stipendiary Magistrate,	1	Pensioner,	4
Private Income,	10	Reporter, Newspaper,	3
Officer, Military,	1	Ropemaker,	4
Veterinary Surgeon,	1	Steward,	4
Butcher,	3	Servant,	11
Baker,	15	Shoemaker,	2
Boatman,	1	Shopkeeper or Merchant,	33
Blacksmith,	5	Slater,	1
Builder,	4	Storekeeper,	5
Carpenter,	2	Teacher,	3
Clerk,	25	Tanner,	1
Car Owner,	3	Turnkey of Gaol,	3
Coach Builder,	4	Tailor,	4
Clothes Vender,	2	Upholsterer,	4
Confectioner,	2	Umbrella Maker,	2
Cornbuyer,	2	Weighmaster,	3
Cooper,	6	Watchmaker,	2
Carrier,	1	Weaver,	1
Cutler,	5	Warden,	3
Farmer,	43	Watchman,	1
Gardener,	4	Widow,	2
Grocer,	4	Orphans,	6
Gilder,	1		
Gunsmith,	3	Total,	310

APPENDIX B.

CLASSIFICATION of PUPILS on ROLL of CLONMEL MODEL SCHOOLS, Sept. 30, 1852.

	Boys.	Girls.	Infants.	Total
First Book,	8	–	54	62
Second Book,	21	36	15	72
Sequel,	17	33	–	50
Third Book,	55	9	–	64
Fourth Book,	29	12	–	41
Fifth Book,	10	11	–	21
Book of Poetry,	39	65	–	104
Elements of Grammar,	29	36	17	82
Parsing and Syntax,	111	65	–	176
Descriptive Geography,	140	101	69	310
Mathematical do.,	94	32	–	126
Arithmetic, Simple Rules,	29	36	20	85
,, Compound Rules,	17	33	–	50
,, Proportion and above,	94	32	–	126
,, Mental,	140	65	49	254

	Boys.	Girls.	Infants.	Total.
Algebra,	10	–	–	10
Mensuration,	39	–	–	39
Geometry,	50	–	–	50
Book-keeping,	10	–	–	10
Hodges' Chemistry,	39	–	–	39
Physical Sciences,	39	–	–	39
Patterson's Zoology,	10	–	–	10
Lessons on Reasoning,	10	–	–	10
Sacred Poetry,	140	101	69	310
Writing on Slates,	–	–	20	20
,, on Paper,	94	65	–	159
,, from Dictation,	94	65	–	159
Plain Sewing, First Class,	–	67	–	67
,, Senior do.,	–	16	–	16
Plain Knitting,	–	8	–	8
Fancy Knitting and Crochet,	–	10	–	10
Cutting Out,	–	20	–	20
Drawing from Models,	40	30	–	70
Singing,	140	101	69	310

APPENDIX C.

AGES of 310 PUPILS on the ROLL of the CLONMEL DISTRICT MODEL SCHOOLS, Sept. 30, 1852.

	Boys.	Girls.	Infants.	Total.						
3 years,	–	–	4	4		12 years,	28	13	–	41	
4 ,,	–	–	14	14		13 ,,	7	13	–	20	94
5 ,,	–	–	19	19	63	14 ,,	8	15	–	23	
6 ,,	–	–	17	17		15 ,,	5	5	–	10	
7 ,,	1	–	8	9		16 ,,	6	6	–	12	
8 ,,	18	3	6	27		17 ,,	2	1	–	3	
9 ,,	22	14	–	36	133	18 ,,	1	2	–	3	20
10 ,,	11	13	1	25		19 ,,	–	1	–	1	
11 ,,	30	15	–	45		20 ,,	1	–	–	1	
						Total,	140	101	69	310	

Average age of each boy 11·2, of each girl 12·1, and of each infant 5·5 years; average of total, 10·2 years.

APPENDIX D.

NAMES of PUPILS most distinguished at the Public Examination, and who were taken, at the expense of the Right Hon. A. Macdonnell, to the Cork Exhibition :—

Henry Quin.
John Armstrong.
Thomas Clarke.
Robert Palliser.
Henry Casey.
Frederick Quin.
Richard Legge.

APPENDIX E.—PUPIL-TEACHERS and MONITRESSES in CLONMEL DISTRICT MODEL SCHOOL.

No.	Pupil-Teachers.	Date of Entrance.	Age.	Religion.	Date of Leaving.	Subsequent and present Occupation.	Teachers' Class.
1	Thad. Ryan,	Aug. 1849,	18	Roman Catholic,	July, 1850,	Teacher of Irishtown N. S. Clonmel; now in training in Dublin,	2[1]
2	John Corbett,	Aug. 1849,	18	Estab. Church,	Aug. 1850,	Second Master in Clonmel Mod. S. for over 2 years; left Nov. '52, now Teacher of Waterford Commercial N.S.,	2[1]
3	Peter M'Donald,	Sept. 1849,	18	Roman Catholic,	July, 1850,	Kilfinane N. S.: now in training in Dublin,	2[1]
4	Patrick O'Rafferty,	Sept. 1849.	16	Roman Catholic,	Feb. 1851,	On special Class in Dublin till July, 1852; now in Maynooth National School, under the Duke of Leinster,	1[3]
5	John Crotty,	Feb. 1850,	16	Roman Catholic,	Jan. 1852,	Irishtown No. 1, N. S., Clonmel,	2[2]
6	James Tracy,	Feb. 1850,	16	Roman Catholic,	April, 1851,	Emigrated with his father and family,	3[1]
7	John Foley,	Mar. 1850,	17	Roman Catholic,	April, 1851,	Cahir N. S.; trained in Dublin in 1852; now in Gormanstown Model Agricultural School,	2[1]
8	John Mahon,	April, 1850,	15	Estab. Church,	July, 1851,	Succeeds No. 2 as Second Master in this School,	2[1]
9	Charles Patterson,	July, 1850,	18	Estab. Church,	Jan. 1852,	Second Master Dunmanway Model School,	2[1]
10	John Riordan,	Sept. 1850,	18	Roman Catholic,	Dec. 1851,	Ditto, Cork; now in training in Dublin,	2[1]
11	James Daly,	Sept. 1850,	17	Roman Catholic,	Jan. 1852,	On Special Class, Dublin, till February, 1853; now Teacher in Catholic College, England,	2[1]
12	Richard Clancy,	Mar. 1851,	17	Roman Catholic,	April, 1852,	National School in Meath,	3[2]
13	Jeremiah Meehan,	Mar. 1851,	18	Roman Catholic,	Sept. 1851,	In Model School for 6 months only; Second Teacher in Clonmel Workhouse National School.	1[1]
14	Patrick Cantwell,	April, 1851,	16½	Roman Catholic,	April, 1852,	National School, Cork,	2[2]
15	Simon Prosser,	June, 1851,	16½	Presbyterian,	Aug. 1852,	Clerk in Tipperary Joint Stock Bank, Clonmel,	2[2]

16	Peter Lawler,	Oct. 1851,	18	Roman Catholic,	Dec. 1852.	Lisronagh National School,		31
17	John Jennings,	Jan. 1852,	16½	Roman Catholic,	May, 1853.	On Special Class, Dublin.		—
18	J. R. M'Gregor,	Mar. 1852.	15½	Roman Catholic,	May, 1853,	On Special Class, Dublin.		—
19	James Byrne,	Mar. 1852,	16½	Roman Catholic,	Feb. 1853,	Clerk in Tipperary Joint Stock Bank, Clonmel,		2[2]
20	John Coe,	Mar. 1852,	15½	Estab. Church,	May, 1853,	On Special Class, Dublin.		—
21	Thomas Graham,	May, 1852,	14	Estab. Church,	—	Yet in Model School; recommended for special class.		—
22	Jeremiah Long,	July, 1852,	18	Roman Catholic,	Mar. 1853,	Cahir National School; succeeded No. 7.		—
23	John Kelly,	Aug. 1852,	18	Roman Catholic,	—	Yet in Model School.		—
24	Stephen Bergin,	Dec. 1852,	20	Roman Catholic,	—	Yet in Model School.		—
25	Henry Wall,	Mar. 1853,	19	Roman Catholic,	—	Yet in Model School.		—
	MONITRESSES.							
1	Eliza Jameson,	1849,		Estab. Church,	1850,	Assists in her father's National School.		—
2	Margaret Carroll,	1849,		Roman Catholic,	Jan. 1852,	Fair Lane National School, Cork; Patron, Right Rev. Dr. Delany; now in training, Dublin.		21
3	M. A. Fleming,	1849,		Roman Catholic,	1852,	Knockainy National School, County Limerick.		2[2]
4	Ellen Finn,	1849,		Roman Catholic,	1851,	Emigrated with her father.		—
5	Ellen M'Clelland,	1850,		Estab. Church,	1852,	Emigrated with her sisters.		—
6	Margaret Wright,	1850,		Roman Catholic,	1851,	Left to housekeep.		—
7	Kate Mahoney,	1850,		Roman Catholic,	1852,	In Tubbernabrona National School; Patron, the Earl of Bessborough,		31
8	Ellen Purcell,	Aug. 1850,	14	Roman Catholic,	—	Yet in the Schools.		—
9	Adelaide Wright,	July, 1851,	14	Protestant Dis.,	—	Yet in the Schools.		—
10	Sarah Tobin,	Nov. 1851,	15	Roman Catholic,	—	Yet in the Schools.		—
11	Mary Jennings,	Jan. 1851,	15	Roman Catholic,	—	Yet in the Schools.		—
12	Rachel Coe,	May, 1852,	15	Estab. Church,	—	Yet in the Schools.		—
13	Johanna Carroll,	May, 1852,	16	Roman Catholic,	—	Yet in the Schools.		—
14	Susan Newstead,	Aug. 1852,	14	Roman Catholic,	Feb. 1853,	Resigned; M. A. Slattery succeeds her.		—
15	Hannah Howell,	Aug. 1850,	16	Presbyterian,	—	Yet in the Schools.		—

Appendix F.—List of Candidate Female Teachers trained in Clonmel Model Schools.

No.	Name.	Religion.	Left.	Occupation.	Class.
1	Catherine Walsh,	Roman Catholic,	1849	Mount Mellery N.S., county Waterford,	3 1
2	Jane Atkinson,	Unitarian,	1850	Special Class, Dublin; now Guilford N.S., county Down,	1 3
3	Maria Hearne,	Roman Catholic,	1851	N.S. in Ennis; since trained in Dublin,	2 1
4	Alice Green,	Roman Catholic,	1851	A National School, then trained in Dublin, now on Special Class,	1 3
5	Maria Cantwell,	Roman Catholic,	1851	Do. trained in Dublin, 1852; then to a N.S.; Patron, the Earl of Bessborough; now Gormanstown Model School,	2 1
6	Anne Heney,	Roman Catholic,	1851	Waterford Workhouse Infants' N.S.,	3 2
7	Maria Morrissy,	Roman Catholic,	1852	Ooning N.S.; Patron, Earl of Bessborough,	Prob.
8	Mary Cushin,	Roman Catholic,	1852	Urlingford N.S., county Kilkenny,	Prob.
9	Jane Kilmartin,	Roman Catholic,	1852	Ballylanders N.S., county Limerick,	3 1
10	Johanna Manning,	Roman Catholic,	1852	Assists her brother in Kilcash N.S.,	3 2
11	Teresa M'Kee,	Roman Catholic,	1853	Clonmel Workhouse N.S.,	2 2
12	Margaret Cantwell,	Roman Catholic,	1853	Templeorum N.S.; succeeds her sister, No. 5,	2 1

No. 2.—THIRD ANNUAL REPORT of the BALLYMENA DISTRICT MODEL NATIONAL SCHOOL, by WILLIAM M'CREEDY, Esq., Head Inspector, and F. W. NEWELL, Esq., District Inspector.

April, 1853.

The CHILDREN on the ROLL are CLASSED as follows: 21st August, 1852.

	Boys.	Girls.	Infants.
First Book,	2	5	40
Second Book,	11	18	13
Sequel,	16	12	2
Third Book,	25	7	5
Fourth Book,	13	8	–
Fifth Book,	7	6	–
Book of Poetry,	20	14	–
Elements of Grammar,	27	51	60
Etymology,	45	21	–
Parsing and Syntax,	45	14	–
Descriptive Geography,	74	56	60
Mathematical Geography,	20	14	–
Agricultural Class Book,	20	–	–
Arithmetical Tables,	74	51	60
First Four Rules,	17	12	60
Compound Rules and Reduction,	30	7	–
Proportion and above,	24	10	–
Mental Arithmetic,	73	56	60
Geometry,	20	–	–
Algebra,	7	–	–
Mensuration,	20	–	–
Book-keeping,	5	–	–
Lessons on Reasoning,	7	–	–
Composition,	20	6	–
Scripture Lessons,	61	21	16
Truth of Christianity,	6	–	–
Sacred Poetry,	74	35	60
Writing on Slates,	2	9	33
,, on Paper,	72	47	27
,, from Dictation,	45	21	–
Singing,	74	56	60
BRANCHES FOR FEMALES.			
Sewing,	–	7	–
Knitting,	–	8	–
Straw Platting,	–	–	–
Fancy Work,	–	19	–
Netting,	–	2	–

GENTLEMEN,—We beg to submit the following as our joint Report of the yearly public examination of this School, held on the 19th, 20th, and 21st of August, 1852. Time of Examination.

Aware of the impossibility of embracing all the minute details of an examination within the limits of that usually held in public, we had, as on former occasions, subjected the three departments of the School to a careful, minute, and thorough examination during five days previously; and, Preparatory Private Examination.

APPENDIX II.

I. Reports on District Model Schools.

Ballymena.

although we regarded this examination as comparatively a private one, inasmuch as the institution was not thrown open to the public at large upon those days, we yet altered the plan of arrangements formerly adopted so far as to intimate very generally that the parents of pupils, or others whose tastes might lead them to wish admission to this part of the proceedings would, on application to the resident Teacher, be freely admitted; and the privilege, we are happy to say, was taken advantage of to some extent; several of the neighbouring clergy and gentry having been present at those more private examinations, with the order and course of which, as well as with the answering of the pupils, they expressed themselves much pleased.

A programme of the course in which the pupils were examined is subjoined, and we have only to say that it was gone through without the omission of a single subject.

Answering of the pupils.

The answering generally was very good, and the different subjects had evidently been studied with much care. If we were to particularize, we should perhaps mention geography, grammar, mental and slate arithmetic, and spelling, both oral and as tested by writing from dictation, as being the branches in which the pupils, both male and female, were most distinguished.

Male department.

The classes in the Male School range from children capable of reading and spelling the Board's First Book of Lessons, to boys who are reading or have read all the Lesson Books to the Fifth inclusive, and who, in addition to the wide range of subjects contained in these books, were prepared and examined in geometry, algebra, mensuration, logic, political economy, arithmetic, grammar, geography, agriculture, and zoology, as set forth in the annexed programme; and of seven boys of whom this, the highest class consisted, we have to state that the best two answered respectively, 144 and 142, out of a total of 156 questions put to each, on all subjects, and that the boy whose answering was numerically lowest, appears to have credit for 95 full and satisfactory replies. In the junior classes the answering was proportionally good; but we shall not further particularize than by laying before you the following table of proficiency:—

Of the 65 boys, then examined in the male department, there were

Able to read the Second Book, or Sequel, correctly,	12
,, the Third and higher Books with ease and intelligence,	26
,, to answer satisfactorily in explanation of the Lesson Books,	22
,, to parse syntactically,	18
,, to parse etymologically,	26
,, to write sentences from dictation with readiness and corectness,	30
,, to trace blank maps *well*, and answer generally on descriptive geography,	41

Able to answer satisfactorily on mathematical and physical geography,	12
,, to answer on the derivation and analysis of words,	17
,, to write a good hand with ease and freedom,	18
,, to write fairly,	20
,, to solve questions in Proportion and above, readily and correctly,	14
,, to answer in notation and numeration, and work sums in the simple rules, satisfactorily,	17
,, to answer with promptitude on mental arithmetic,	39
,, to answer satisfactorily on the Lessons on Money Matters,	10
,, to answer fairly on the Lessons on Reasoning,	6
,, to acquit themselves satisfactorily in geometry, mensuration, and algebra,	6

Female Department.—In the Female School there is the same number of classes, and the course of study, with the exception of some branches generally thought more suited to boys, embraces the same gradation of subjects as is set down for the male department. The fifth class, at the time of examination, included six girls, none of them, we should think, above 15 years of age; to these were given in turn 110 rounds of questions, divided proportionally among the several subjects of their course, and the two who most distinguished themselves answered respectively 105 and 104 questions, while the lowest in point of proficiency, a very young girl, got credit for 91 satisfactory answers. Indeed, nothing could well exceed the admirable manner in which this class acquitted itself, on all subjects; no branch evidently had been neglected to the profit of the rest, but each, it was made patent to the examiners, had received from both Teacher and pupils that measure of attention due to its interest and importance. Female department.

In this School too, as in the Boys', the junior classes answered equally satisfactorily, regard being had to their standing and classification; the details, however, we shall not enter upon by any lengthened description, as they are not of sufficient interest to admit of such a mode of treatment, and as they can be most readily seen, and most easily read, together with all other important results of the examination in the subjoined table.—There were 52 girls in all examined, and of these there were

Able to read the Second Book, or Sequel, correctly,	14
,, ,, the Third and higher Books with ease and intelligence,	19
,, to answer satisfactorily in explanation of the Lesson Books,	26
,, to parse syntactically,	13
,, to parse etymologically,	13
,, to write sentences from dictation with readiness and correctness,	14
,, to trace blank maps *well*, and answer generally on descriptive geography,	27
,, to answer satisfactorily on mathematical and physical geography,	12
,, to answer on the derivation and analysis of words,	12
,, to write a good hand with ease and freedom,	17
,, to write fairly,	19

Able to solve questions readily and correctly in the Compound Rules, Proportion, and Practice,	12
,, to answer in Notation and Numeration, and work sums in the simple rules, satisfactorily,	7
,, to answer with promptitude on Mental Arithmetic,	25

Ballymena.

Infant department.

In the Infant School there was a class in the Board's Third Book, which the little pupils read with the utmost intelligence, and succeeded admirably in giving their simple explanations of the subject matter. These, and a large number of the remaining pupils, also answered readily and with much spirit in the elements of grammar, in numeration, and the easier arithmetical tables, in the usual exercises of the Abacus or Ball-frame, and seemed thorough proficients, as far as they could be thought to go, in the outlines of local geography, many of them being able to trace quite correctly, and with much ease and quickness, blank or outline maps of Europe, Asia, and Ireland.

General result as compared with the former year.

As compared with the examinations of last year, we have to remark that we observed much improvement generally throughout the entire course of instruction imparted, but particularly in the important branches of reading and writing, more especially the former,—and we can with confidence assert, that there is not a single department of study open to the pupils of these Schools in which the progress made by them during the past year was not, in all respects, most satisfactory.

Public Examinations.

The different subjects presented to the notice of our visitors on the days of the public examination, and the manner in which the pupils acquitted themselves, appeared to excite considerable interest. The answering in descriptive and mathematical geography, and in political economy, agriculture, and zoology,—the rapid execution of operations in arithmetic, and the correct performance of difficult exercises in orthography, selected in many cases by the audience, were among the most popular portions of the proceedings, if we except the answering of the infants on various points of natural history, and some excellent part-singing, by which the business of each day was very pleasingly diversified.

We have to add, that many very pretty specimens of the different kinds of needlework, wrought by the pupils, were exhibited in the Girls' School-room, and attracted much attention from our female visitors, many of whom, reputed as no mean judges, expressed themselves in terms of warm admiration of the taste and skill displayed in a large number of the finer pieces.

Monitresses.

Since the examination of these Schools we have had an opportunity of examining the six Monitresses who act as assistants in the female and infant departments, and we have great pleasure in stating that, both in the written and oral parts of the examination, they acquitted themselves in a creditable and satisfactory manner.

Pupil-Teachers.

The Pupil-Teachers were not examined, in consequence of their being, with one exception, recent admissions, and there-

fore not fully prepared to stand the test to which their predecessors were formerly subjected. We have since, however, examined not less than six young persons who had just before completed their term of training in this institution as Pupil-Teachers, and who are now, as principal Teachers, in charge of ordinary Schools on their own account; and we are truly gratified to be able to report that four of them exhibited such proficiency as to entitle them to the first division of our third class, while the other two, somewhat deficient in readiness, though in other respects hardly less qualified, obtained the second division of the same.

We have the honour to remain, Gentlemen, your obedient servants,

William M'Creedy,
Head Inspector.

F. W. Newell,
District Inspector.

The Secretaries.

Note A.

Ballymena National District Model School.—Programme of Examination, August, 1852.—Male Department.

First Class.—Reading: to read, spell, and explain any part of First Book. Grammar: to know the vowels and stops. Geography: Map of the World. Mental Arithmetic: to add and subtract. To repeat portions of Sacred Poetry.

Second Class.—Reading: to read, spell, and explain any portion of Second Book. Grammar: to know the articles, noun, verb, and adjective. Geography: Maps of the World and Ireland (outline). Slate Arithmetic: first three rules, simple and compound. Mental Arithmetic: multiplication table.

Sequel Class.—Reading: to read, spell, and explain any portion of Sequel. Grammar: to know the parts of speech. Geography: Map of the World; Outline Maps of Europe and Ireland. Arithmetic: first three rules, simple and compound.

Third Class.—Reading: to read and explain History of Moses, Illustrations of Scripture, Natural History to p. 132, Lessons on Money Matters, Lessons on Geography (descriptive). Spelling: to spell, or write from dictation, any sentence from pp. 28 to 33 of Spelling-Book Superseded, or any sentences from Third Book. Grammar: to parse a sentence etymologically. Geography: Outline Maps of Ireland, Europe, and Asia. Slate Arithmetic: compound rules, reduction, and bills of parcels. Mental Arithmetic: first twelve rules in Board's Treatise. Tables: pence, shilling, troy, apothecaries', and avoirdupois weight; dry, liquid, long, and cloth measure; time.

Fourth and Fifth Classes.—Reading: to read and explain the Physical and Political Geography of Europe, as contained in Fourth Book, and selections from Book of Poetry relating to the phenomena of the seasons. Grammar: to parse a poetical passage from Fourth or Fifth Book; junior division to parse a plain sentence syntactically. Geography: to trace all the Outline Maps. Sullivan's Spelling-Book: Part III., words spelled and pronounced alike, but differing in signification, and the most difficult words in the language, pp. 108 to 120; English etymologies; rules for spelling, with sentences for dictation from these rules, pp. 70, 71; to write from dictation any passage from Fourth or Fifth Books. Derivations: Saxon, Latin, and Greek prefixes and affixes (Grammar, pp. 91 to 97); Latin and Greek etymologies (Grammar, pp. 116 to 120). Slate Arithmetic: selections from all the principal rules to geometrical progression. Mental Arithmetic: all the rules in Board's Treatise. Mensuration: plane surfaces and a few problems in solids. Political Economy: all the Lessons on Money Matters. Agricultural Class Book: soils, plants, manures, draining, rotation of crops, &c. Patterson's Zoology: classification of the animal kingdom, with illustrations and examples. Composition.

Fifth Class.—To read and explain laws of motion and the mechanical powers, with exercises. Algebra (senior division): quadratic equations; (junior division): first three rules, and the simple equations at the beginning of Thomson's Treatise. Geometry (senior division): first three books; (junior division): first book. Logic (senior division): first nine chapters of "Easy Lessons on Reasoning;" (junior division): first six chapters. Geography Generalized: from ninth to fourteenth chapters inclusive.

Singing—Conducted by Miss Cosgrave and Mr. Given.—Besides selections from Hullah, as heretofore, the following pieces have been added to the musical programme of last year:—"Hark! the Evening Hymn is stealing!" (three voices), words by Moore; Boat Glee, for four voices—music by Sir John Stevenson; "O come ye into the Summer Woods!" —Mary Howitt; "Say, shall we roam the Woods to day?" (Round); Bruce's Address; "There's nae luck about the house," &c.; "Christmas Day;" Anniversary Song, by Resident Teacher.

JOHN GIVEN,
Resident Teacher.

NOTE B.

FEMALE DEPARTMENT.

August, 1852.

First Class.—Reading: to read, spell, and explain any part of First Book. Geography: Map of the World. Arithmetic: to add and subtract. To repeat portions of Sacred Poetry.

Second Class.—Reading: to read, spell, and explain from page 74 to 117. Grammar: to know the article and noun. Geography: Maps of the World and Ireland. Mental Arithmetic: multiplication table.

Sequel Class.—Reading: to read, spell, and explain any portion from page 89 to 131. Grammar: to know article, noun, adjective, and verb. Geography: Maps of the World, Europe, and Ireland. Arithmetic: first three rules (simple). Mental Arithmetic. Tables: pence, shillings; troy, apothecaries', and avoirdupois weight; time.

Third Class.—Reading: to read and explain History of Moses, Illustrations of Scripture, Lessons on Geography. Spelling-Book Superseded: First Part. To write from dictation. Grammar: to parse a sentence etymologically. Geography: Outline Maps of Ireland and Europe. Slate Arithmetic: compound rules and reduction. Mental Arithmetic: first eight rules (Board's Treatise). Tables: pence, shillings; troy, apothecaries', and avoirdupois weight; dry, liquid, and long measure; time.

Fourth and Fifth Classes.—Reading: to read and explain the Physical and Political Geography of Europe, in Fourth Book; selections from Book of Poetry. Grammar: to parse a sentence from Fourth Book. Geography: to trace all the Outline Maps. Spelling-Book: Part Third, words spelled and pronounced alike, but differing in signification; rules for spelling, sentences from dictation from these rules. Dictation: to write from dictation any passage from Fourth Book. Derivations: Saxon, Latin, and Greek prefixes and affixes. Slate Arithmetic: selections from the principal rules to interest. Mental Arithmetic: all the rules in Board's Treatise. Geography Generalized: first three chapters.

ISABELLA CRAIG, Teacher.

NOTE C.

INFANTS' DEPARTMENT.

August 19, 1852.

Programme for Summer Examination.—Reading, spelling, and explanation—First, Second, Sequel, and Third Books. Grammar: to tell the parts of speech from any lesson in Third Book. Geography: Maps of the World, Europe (outline), Asia, Africa, Ireland (outline), England (outline). Picture Lessons: parts of speech, mechanical powers, geometrical figures, the Sheep, the Cow, the Elephant. Trades: the baker. Arithmetic: four simple rules. Tables: pence and shillings. Singing: The Whale, The Little Clock, The Time Table and Pence Table, Hymns, Amusing Rhymes, &c.

ELEANOR MARY COSGRAVE, Teacher.

APPENDIX H.

I. Reports on District Model Schools.

Ballymena.

NOTE D.

Number of pupils on Rolls, week ending August 21, 1852:—

	Boys.	Girls.	Infants.
At 5*s.* per quarter,	18	7	3
At 2*s.* 6*d.* ,,	22	26	23
At 1*s.* 1*d.* ,,	34	23	34
Total on Rolls from week ending August 21, 1852,	74	56	60
Of these there were—			
Under 5 years,	–	–	21
5 ,, but under 7 years,	–	–	29
7 ,, ,, 11 ,,	51	25	10
11 ,, ,, 15 ,,	18	29	–
15 and upwards,	5	2	–
	74	56	60
Average age,	10¼	10⅞	5 1/60
Of these, on the Rolls for same time, were—			
Presbyterians,	42	34	23
Roman Catholics,	15	16	19
Episcopalians,	14	5	17
Moravians,	2	–	1
Unitarians,	1	1	–
	74	56	60

Number admitted from August 16, 1851, to August 21, 1852:—

	Boys.	Girls.	Infants.
Presbyterians,	47	40	17
Roman Catholics,	17	24	15
Episcopalians,	10	7	15
Moravians,	1	–	–
Unitarians,	1	–	1
	76	71	48
Daily average attendance from August 16, 1851, to August 21, 1852,	56	40	44
Daily average number on Rolls for same time,	71	53	59
Highest number on Rolls for same time,	86	58	91

[NOTE E.

NOTE E.

Year.	Month.	Amount of Requisites sold from August 16th, 1851, to 21st August, 1852.									Amount of School Fees received from August 16th, 1851, to 21st August, 1852.								
		Boys.			Girls.			Infants.			Boys.			Girls.			Infants.		
		£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1851,	August (from 16th),	0	14	3	0	4	1	0	4	7½	0	11	6	0	1	4	0	2	6
,,	September,	1	15	1½	0	5	6½	0	2	4	4	5	9	2	4	2	1	9	8
,,	October,	0	11	11	0	13	2	0	4	4½	0	19	3	1	11	4	1	14	1
,,	November,	1	10	7½	0	11	3½	0	4	10½	5	10	0	3	7	2	2	3	2
,,	December,	0	10	8	0	5	7½	0	1	8½	2	14	11	1	9	6	0	6	6
1852,	January,	1	0	4	0	9	2	0	3	4	1	3	4	1	1	2	0	13	4
,,	February,	0	18	6½	0	6	10½	0	1	5½	3	19	1	2	1	5	2	6	6
,,	March,	0	17	7½	0	6	7½	0	3	0½	1	15	5	1	16	8	0	12	9
,,	April,	0	11	3	0	1	8	0	3	0½	0	18	0	0	8	0	1	14	0
,,	May,	1	8	5	0	13	4	0	6	4½	4	0	10	4	3	0	2	3	9
,,	June,	0	12	0	0	5	3	0	3	2½	2	7	6	1	19	6	1	0	1
,,	July,	0	15	7	0	11	1	0	2	11	2	12	6	1	1	0	1	0	3
,,	August (till 21st),	0	6	0	0	8	3½	0	0	8	2	2	10	1	17	9	1	15	3
		11	12	4	5	2	0	2	3	11½	33	0	11	23	2	0	17	1	10

NOTE F.—LIST of the PUPIL-TEACHERS who have entered the BALLYMENA MODEL SCHOOL from 16th August, 1851, till 21st August, 1852, being Appendix to return of the previous year.

Names.	Age.	Religious Denomination.	Former Employment, or that of Parents.	Where Educated.	When Appointed.	Time of Training.	Cause of Removal and Destination.
Wm. Robert Ellison,	18	Presb.,	Carter,	Oldstone N. S., and others,	2nd Dec., 1851,	—	Still in the Establishment.
John Alexander,	16	Presb.,	Farmer,	Ballymena N. M. S., & others,	8th Dec., 1851,	—	Still in the Establishment.
George Murray,	16	Presb.,	Teacher,	Ramelton N. S.,	19th Feb., 1852,	—	Still in the Establishment.
W. Millar,	18	Presb.,	Teacher,	Ahoghill N. S., and others,	1st March, 1852,	—	Still in the Establishment.
Henry M'Neill,	16	R. C.,	Farmer,	Glenarm N. S.,	1st May, 1852,	3 Months,	Resigned; at home.
Felix Reid,	19	R. C.,	Farmer,	Glenarm N. S.,	1st May, 1852,	3 Months,	Resigned; at home.
James M'Grattan,	16	R. C.,	Pedlar,	Newtownards N. S.,	1st May, 1852,	3 Months,	Resigned; unknown.

No Teachers have entered the Boys' School as ordinary Pupils during the past year.

NOTE G.—MONITRESSES who have entered the BALLYMENA MODEL SCHOOL from 16th August, 1851, till 21st August, 1852, being Appendix to return of previous year.

Names.	Age.	Religious Denomination.	Former Employment, or that of Parents.	Where Educated.	When Appointed.	Time of Training.	Cause of Removal and Destination.
Jane Brown,	19	Presb.,	Pupil at M. S.,	Ballymena M. N. S., & others,	1st Dec., 1851.	—	Still in the Establishment.
Charlotte M'Gregor,	18	Presb.,	Pupil at M. S.,	Ballyeaston & Ballymena D. M.	1st July, 1852,	—	Still in the Establishment.
Matilda Drummond,	19	Presb.,	N. S. Teacher,	Clinty N. S., and others,	1st June, 1849,	3 Years,	Appointed to Connor Fem. N. S.

NOTE H.—LIST of PUPILS in the BOYS' SCHOOL who have become Teachers, from Aug. 16, 1851, to Aug. 23, 1852.

Name.	Age.	Religious Denomination.	Destination.
Samuel Ronnell,	18	Presb., .	Teaching Connaught Liggan National School.
Samuel Strange,	17	Presb., .	Teaching Whopstown N. S.
William Cowan,	17	Presb., .	Teaching Buckna N. S.
John Alexander,	See	Return, Note F.	Pupil Teacher, Ballymena Model School.

NOTE I.—LIST of PUPILS in the GIRLS' SCHOOL who have become Teachers, from 16th August, 1851, to 21st August, 1852.

Name.	Age.	Religious Denomination.	Destination.
Jane Brown, . .	See	Note G.,	Appointed Monitress in Ballymena Model School.
Charlotte M'Gregor,	See	Note G.,	Appointed Monitress in ditto.
Catherine Gillan, .	18	R. C.,	Greencastle N. S., Tyrone.
Susan Kearney, .	18	R. C.,	Lisnagarran National School.

NOTE K.—LIST of TEACHERS whose Names, Ages, &c., appear in the previous Return for 1850–51, but whose Appointments were not made until after 16th August, 1851.

Names.	Age.	Religious Denomination.	Former Employment or that of Parents.	Where Educated.	when appointed.	Time of Training.	Cause of Removal and Destination.
Patrick M'Mullen,	18	R. C.,	Farmer,	Seymour's Bridge N. S.,	16th Sep. '50,	1 year, .	Course finished; Magheralane N. S.
Denis M'Curdy, .	18	R. C.,	Weaver,	Cushendall National S., .	1st Oct. '50,	11 mths.,	Training course finished; Kilmore N. S.
John Hewston, .	18	Episco.,	Teacher,	Malin National School, .	15th Oct. '50,	1 year, .	Training course finished; Malin N. S.
James Kenny, .	18	R. C.,	Farmer,	Cushendall N. S. & others,	1st Jan. '51,	1 year, .	Training course finished; Knocknacarry N.S.
John Rea, . .	17	Presb.,	Farmer,	Ballymena M. S. & others,	1st Jan. '51.	1 year, .	Course finished; emigrated.
Archibald Beattie,*	20	Presb.,	Farmer,	Broughshane N. S. & others,	21st July 51,	1 year, .	Course finished; Rathmore N. S.

* Beattie entered as a Pupil on the 17th June, 1850.

APPENDIX H.

I. Reports on District Model Schools

Athy.

No. 3.—Report upon Athy District Model Agricultural School, by Edward Butler, Esq., A.M., Head Inspector of National Schools.

April 1853.

Gentlemen,—I beg to submit the following Report upon the Athy District Model Agricultural School, which came into operation in August last; and in which the course, in addition to the usual branches of a sound English education, embraces instruction in the principles and practice of improved husbandry.

School-house and premises.

School-house and Premises.—This institution, comprising both a literary and an agricultural department, stands a short distance from Athy, one of the county towns of Kildare, on the leading road to Dublin, and close to the railway station. The site on which it is erected, about eight acres in extent, has been granted to the Board by his Grace the Duke of Leinster, at a nominal rent of £10 a year.

The house contains on the ground floor a good-sized hall, large dining-room, store-room, kitchen, with larder and servants' room, &c.; and two apartments, one for the Head Master, the other for the use of the resident Pupil-Teachers during their study hours. The second story, which is reached from the hall by a large flight of stairs, consists of an infirmary, two bed-rooms for the use of the Head Master, a wash-room and a dormitory for the four Pupil-Teachers and four agricultural boarders, who reside on the premises, under the superintendence of the Head Master.

The dormitory is 32 feet in length, 22 in breadth, and nearly 11 in height, and is divided into eight separate compartments, about 8 feet square each, by wooden partitions, which rise to the height of 7 feet from the floor. By this arrangement, each young man occupies his own room without interference from his neighbours; while the free space above the partitions secures the thorough ventilation of the several compartments, each of which has a small window.

The furniture, with which the house has been provided, is plain but substantial; and the necessary linen and articles of delft have also been supplied by the Commissioners.

The Agriculturist's residence is attached, and occupies one of the sides of the farm-yard: it consists of a parlour, two bed-rooms, and a kitchen. The other sides of the yard are occupied by the usual farm offices.

School-rooms.

School-rooms.—On the ground floor, and at right angles to the portion of the house just described, are the two large school-rooms, with closets for caps, bonnets, and cloaks; and an intermediate room, fitted up with a gallery, and which, according to the original design, was to be used for the separate religious instruction of the children of different denominations, and occasionally as a class-room for collective lessons, but which has now been appropriated as a temporary school for the infants. All these rooms communicate with one another,

and open severally into a side lobby, by which access can be had to any of them from the house without passing through the others.

The boys' school-room is 45 feet by 28, and 24 feet high. The ceiling is coved, with the exposed parts of the principals wrought and stained to imitate oak. Presses for books, papers, &c., have been made in the side walls, and rails have been put up at various heights for hanging the reading cards, arithmetical tablets, maps, pictures, &c.

The desks, each 8 feet in length, are arranged along both sides, in groups of three, leaving a passage in the centre of the room, by which the teachers or visitors can at all times go from class to class without disturbing any. The children all face towards this passage, and can be readily seen from every point by the Master. There are six groups of desks, four on one side and two on the other; the remainder of the space on this side, which was at first fitted up with small desks and seats for the male infants, being now occupied by forms.

When it is desired to instruct on the black board in arithmetic, or to give geography lessons to the several classes without calling them from their seats, an upright post, with a slide, which, by means of a screw, can be fixed at any required height, and on which the board or map is hung, is placed in a socket inserted in the floor, about $2\frac{1}{2}$ feet from the centre of the foremost desk of each group. The lesson-post serves all the purposes of the easel, takes up much less space, and is more convenient and portable.

This plan of grouping the desks tends very much to facilitate the establishing and maintaining of good order and discipline in a school, and to remove many of the causes of the noise so distressing in some schools. It was first tried, at my suggestion, in 1849, in the Newry District Model School, as mentioned in my Report on that School, published in the Appendix to the Sixteenth Report of the Commissioners; and it has been since adopted in fitting-up the Trim, Galway, and Athy District Model Schools, and one of the departments of the West Dublin Model School. Though in the beginning the Teachers naturally felt some awkwardness and difficulty in adapting themselves to this unusual arrangement, they soon became reconciled to it, and by every day's experience impressed more and more with its many advantages.

The room for the girls is 47 feet long, 28 feet wide, and of the same height with that for boys: it is provided with presses in the walls, rails for maps and tablets, work-table, and work-press, and is fitted up with four groups of desks, two on either side, for the more advanced girls, and two groups of lower desks, which were intended for the girls under seven years of age, who would have attended here if no special department had been appropriated to the infants. A portion of this room can, when required, be screened off by a large green baize curtain, and be thus formed into a kind of class-room, where

needlework may be taught, or collective lessons given to the girls seated in a small gallery with which it is provided.

There was no separate apartment for the infants in the plans first approved by the Commissioners: as the town is small, it was probably conceived the population would not warrant the establishing of three distinct schools. When, however, the buildings were finished and the fittings placed, and while the arrangements to be made for the opening were under consideration, the desirableness of having a school for the infants, as well as for the boys and the girls, was brought in a special manner under their notice; and acceding to the proposal, they directed that, as a temporary measure, the religious instruction room should be fitted up for the infants, and the necessary steps taken to render some of the rooms in the house available, when required, for separate religious instruction. This room, which is only 27 feet long, 19 wide, and 15 high, is very unsuited for its present use; and the space for the lesson drafts and the marching exercises is so inadequate, that the Teacher has not found it possible to carry out the infant school system with any degree of efficiency.

Play-grounds.

Play-grounds.—There are two play-grounds, one for the boys, and the other for the girls and infants. The former is supplied with swing pole and horizontal bars; the latter with parallel bars, and with a sliding apparatus for the infants. A separate play-ground for the infants is greatly needed.

Teachers.

Teachers.—The Head Master, Mr. John Walsh, has been for many years engaged under the Board, and he conducted the several schools he has been in charge of to the entire satisfaction of the Managers and Inspectors under whom he has acted. He was trained at the Commissioners' Central Establishment in Dublin, in the year 1838; at the general examination of 1848, he was placed in the second division of first class, and was promoted, in 1850, to the highest division of this class.

Mrs. O'Reilly, the Mistress of the Girls' School, was trained in Dublin, in 1844, and was promoted to the second division of first class at the examination of 1849. At the time of her appointment to Athy, she was Teacher of the Ballinvally Female National School.

Miss Craig, under whom the Infants' School was first placed, was a pupil of the Dublin Model School, where, after passing through the several classes of the Girls' School, she underwent a regular course of training in the Infants' Department. She remained only a short time in Athy; and was appointed, in September, to the same office in the Clonmel District Model School, where she died soon after. On her removal, Miss Palmer, from the Marlborough-street establishment, was sent to conduct the infants' department in Athy, and she still holds the situation.

The Assistant-Mistress for the Infants' School, Miss Maguire, was, at the time of her nomination, acting as assistant in the

Athy Workhouse School, where she so discharged her duties as to deserve a strong recommendation from the Board of Guardians, and from the Inspector of the district.

Miss Palmer is a member of the Established Church; the other three Teachers are Roman Catholics.

Besides the Head Master, there are in the Boys' School four Pupil-Teachers (one a member of the Established Church, the others Roman Catholics), who are engaged during school-hours imparting instruction to the several classes, under the direction of the Master.

No assistance of this kind has been supplied to the Girls' School, as the attendance has been very limited. Yet, in my opinion, much advantage would accrue from the appointment of one or two Monitresses; not, indeed, that their services are absolutely needed, but because the regular course of training which these young persons would be undergoing, would, after the lapse of a few years, fit them to take charge of country schools.

Salaries, &c.

Salaries, &c.—The Head Master receives £60 a year from the Commissioners, and one-half of the fees paid by the boys; he has furnished apartments, with coal and candles, and an allowance of £20 a year for a thorough servant. He is also paid by the Commissioners at the rate of £16 per annum for each of eight boarders—four of whom are Pupil-Teachers chiefly employed in the literary department, and four are agricultural pupils.

The Mistresses have each a salary of £35, with an allowance of £20 for lodgings; besides which they are entitled to one-half of the fees of their respective schools.

The Assistant Mistress' salary is fixed at £30 per annum, without any allowances.

Opening of the School.

Opening of the School.—Business commenced on the 10th day of August; and on the 12th took place the public opening of the schools by the Resident Commissioner, the Right Hon. Alexander Macdonnell, who was accompanied by the Secretary, James Kelly, Esq.; the Accountant, James Claridge, Esq.; and the Architect, F. F. Darley, Esq.

The various Clergymen of the town and neighbourhood, and such other persons as were thought likely to be interested in the proceedings, received due notice of the opening of this institution, and several availed themselves of the opportunity to visit it, among whom were the Rev. F. S. Trench, the Rector of the parish, and his Curate, the Rev. Mr. MacDonald; Rev. Messrs. Martin, Archer, Cotton; S. Sheane, Esq., J.P., &c.

Attendance.

Attendance.—Although public notice had been given for many days previous to the opening by printed placards posted through the town, and by advertisements in the local paper, the number of children applying for admission was very small; and when the school began, there were in attendance only 13 boys, 1 girl, and 1 infant. The numbers have, however, gradually increased and up to the end of February, there had

Appendix H.
I. Reports on District Model Schools.
Athy.

been admitted 240 children, the number then on the rolls being 207, and the average daily attendance throughout that month, 121.

In Appendix (A 1) will be found a table exhibiting, month by month, the various details regarding the attendance of the children and the amount of fees received, together with the sums paid by the children for school requisites, and a statement of the petty expenses incurred in the Schools.

Rates of payment.

Rates of Payment.—The sums received as school-money from the children, from the 10th of August to the 28th of February, amounted in all to £24 6*s.* 4*d.*, and of the 207 children on the rolls at the latter date, there were entered—

	Boys.	Girls.	Infants.	Total.
At 5*s.* per quarter, .	19	–	–	19
At 2*s.* 6*d.* ,, .	38	6	1	45
At 1*d.* per week, .	63	51	29	143
Total, .	120	57	30	207

Ages.

Ages.—With regard to age, the infants are classed as follows:—

3 are 2 years old.	9 are 5 years old.
2 ,, 3 ,,	5 ,, 6 ,,
4 ,, 4 ,,	7 ,, 7 ,,

Subjoined is a similar return of the number of boys and girls of the several ages:—

7	boys and	–	girls of	7	years of age.
16	,,	10	,,	8	,,
11	,,	4	,,	9	,,
15	,,	6	,,	10	,,
12	,,	4	,,	11	,,
18	,,	5	,,	12	,,
14	,,	11	,,	13	,,
18	,,	5	,,	14	,,
5	,,	4	,,	15	,,
3	,,	3	,,	16	,,
–	,,	4	,,	17	,,
–	,,	1	,,	18	,,
1	,,	–	,,	19	,,

It will appear from this that about 40 per cent. of the boys and girls are between the ages of 7 and 11, and 50 per cent. between the ages of 11 and 15, and that the proportion of girls over 15 years of age is much greater than of boys.

Occupation of parents.

Occupation of Parents.—A detailed statement of the trade or occupation of the parents, and of the number of children belonging to each, who attend this School, is given in the Appendix (A 2). This return may be thus summed up:—

1	Orphan.		
41	the children of	Labourers.	
9	,, ,,	Servants.	
30	,, ,,	Farmers and Gardeners.	
49	,, ,,	Mechanics.	
44	,, ,,	Shopkeepers and persons in business.	
26	,, ,,	Clerks and holders of petty offices.	
7	,, ,,	Professional men or persons not in business.	

Since the date down to which these returns are brought, one of the Curates of the town has sent his three sons, and another Clergyman, who resides a short distance from Athy, has sent two of his children to the School.

Athy.

Religious Denominations.

Religious Denominations.—Of the children on the rolls at the end of February, there were—

	Boys.	Girls.	Infants.	Total.
Roman Catholics, .	97	51	28	176
Members of the Established Church, . . .	20	6	2	28
Members of the Society of Friends, . .	3	–	–	3

Religious instruction.

Religious Instruction.—The regulations and arrangements for the religious instruction of the children are similar to those adopted in other institutions of this description. One hour on Mondays is set apart for this purpose, and half an hour on the four subsequent week days. At these times, one of the Protestant Clergymen of the parish instructs, in a room apart, the children belonging to the Established Church, the Rector usually attending on Mondays; while the Roman Catholic Teachers impart, in the school-room, to the Roman Catholic children the same kind of instruction they were wont to give in their former schools.

Literary instruction.

Literary Instruction.—The nature and extent of the instruction proposed to be imparted to the children, the times allotted to each subject, and the classification of the children, will be seen by a reference to the different tables and programmes inserted in Appendix B.

Having examined the children in the first week of March, I now proceed to state the results of that examination, and the progress made in the several departments.

Boys' School.

Boys' School.—The *reading* of the boys in the two higher classes was generally good, fluent, and correct; and 13 out of 29 showed, by their tone and inflexions, that they apprehended the meaning of the passages read. In the junior division of the School, embracing the First Class and four sub-divisions of the Second and Sequel, about 15 out of 61 could be said to read the Second Lesson Book with ease and correctness, while a like number could not read a simple sentence without great hesitation: the remainder had made fair progress, considering their attendance. The chief defects noticed were the mispronunciation of the conjunction *and*, of the *th*, and the hurried and indistinct articulation of certain syllables.

In *orthography* the results were very satisfactory, so far, at least, as *viva voce* spelling was concerned; for writing from dictation has not been as yet sufficiently attended to, except with the highest class, in which, out of 14 exercises, 5 were written with readiness and accuracy, and 3 with tolerable correctness.

As regards a knowledge of the substance of the lessons read in the School, the boys were certainly deficient; and I cannot

Appendix H.

I. Reports on District Model Schools.

Athy.

but attribute this in some measure to the want of a class-room in which to make them revise these subjects in the form of collective lessons. Means to supply this want to a certain extent, cannot fail to offer themselves to the Master; and, at a future examination, the boys, no doubt, will acquit themselves in this respect in the same satisfactory manner as in others.

I inspected the *penmanship* of 96 boys, 65 of them belonging to the junior division of the School; and there were but 10 whose writing, taking all circumstances into account, could be characterized as bad, while that of 21 appeared good, and that of 39 fair, both in style and execution. The copy-books, I should add, were neat, clean, and carefully preserved.

As to *arithmetic*, the answering was, on the whole, creditable, much pains having evidently been taken to make the boys acquainted with notation and the practical application of the several rules. The Master has not as yet been able to do much towards giving the boys a regular systematic explanation of the principles, or requiring from them accurate definitions of the terms employed, and clear concise enunciations of the rules by which the questions are worked. This part of the course will have to be carefully attended to.

In the other branches which have been introduced, very little progress has taken place, except in *geography*, in which the definitions, the relative positions of the continents and their sub-divisions, together with other leading features of local geography, have been carefully taught, chiefly from the maps.

Girls' School.

Girls' School.—Of the 29 girls whom I examined, 11 belonged to the Third and Fourth Classes, and 14 to the Second and Sequel. The *reading* of only 4 in the higher divisions was fluent and intelligent; and of the 14 girls of the junior divisions, 10 read with accuracy and ease in the Second Lesson Book.

The *spelling* was generally good, and the 7 Fourth Class girls showed some familiarity with the rules of orthography, and answered very fairly in the exercises given in Dr. Sullivan's Spelling Book Superseded. Four of them wrote with tolerable accuracy and readiness a short passage read for them from their Lesson Book.

The specimens of *writing* were good in 12 cases, fair in 3, and bad in 5; but the copies, though neatly written and cleanly kept, showed many faults of orthography, and had not been revised and corrected with proper care.

In *arithmetic* the advanced girls acquitted themselves very creditably, and the younger children had made some progress in the addition and multiplication tables.

The Fourth Class girls were questioned at some length on the Natural History lessons contained in their Lesson Book, and answered tolerably well, showing evidently they understood and had retained much of what was taught to them; but the Third Class girls knew very little indeed of the subject-matter of their lessons.

The girls of this Third Class were also very deficient in *geo-*

graphy; but the others possessed a fair knowledge of the general outlines of the Map of the World, and of the principal details of the physical and political geography of Europe and of Ireland.

A few of the girls could repeat the definitions of the parts of speech, and 2 were able to parse with ease and correctness; but the instruction in this branch has not as yet been attended with very satisfactory results.

The *needlework* has been carefully carried on by the mistress, and she has omitted no opportunity of instructing the girls in the various kinds of plain work, as well as in those of a finer and more ornamental description.

Infants' School.

Infants' School.—In consequence of the unsuitableness of the room allocated to the infants, the Teachers have found it very difficult to introduce the exercises and routine of lessons usually adopted in similar Schools. The want of a separate play-ground, with its proper apparatus, for the infants, has also been a source of difficulty and annoyance. These drawbacks notwithstanding, the infants have been taught their several lessons with much care, and they sang their little songs, and repeated the tables from the arithmeticon, with liveliness and readiness. Their answers to questions on the Map of the World were pretty fair, but seemed to have been got almost wholly by rote.

Pupil-Teachers. Agricultural Boarders.

Pupil-Teachers.—Agricultural Boarders.—As already mentioned, there are residing in the house, and maintained at the expense of the Commissioners, 4 Pupil-teachers, who, under the direction of the Head Master, are engaged each day during school-hours teaching the classes intrusted to them, and directing and guiding them in their several exercises. To prepare them for the proper discharge of these duties, a certain number of hours is set apart in the mornings and evenings, which they devote to the study of subjects appointed by the Inspector or Head Master; or during which they receive from the Master special instruction in relation to the nature of the lessons they are to teach, and to the manner in which these lessons are to be taught. By this plan the private studies of these young men, and the instructions they receive, are made subservient not alone to their intellectual improvement, but chiefly and immediately to the wants and requirements of the School, where they have every day an opportunity of applying their newly acquired information; so that, at the end of their year's training, they will not only be well-grounded in the more important of the branches of instruction usually introduced into elementary schools, but will have attained a practical acquaintance with the most effective methods of teaching the different lessons, sufficiently extended to render them useful and intelligent teachers.

Very few candidates,—only six, and these rather below the age at which it is desirable a young man should enter upon his course of training in a District Model School,—offered for examination; and their acquirements were generally so deficient,

APPENDIX H.

I. Reports on District Model Schools.

Athy.

that it was not without much hesitation three of them were recommended to the Commissioners as at all eligible. I am happy, however, to have to state that they have improved very much since their appointment, as I found upon examination; and that they have been both diligent at their studies, and painstaking in the School. Two were pupils of ordinary National Schools in the district: the third came from the Athy Workhouse School, the Guardians of the Poor Law Union having provided him with the necessary outfit. A few weeks after the opening, the fourth Pupil-Teacher was appointed by the Commissioners from the Dublin Model School.

The course of study pursued by them, and the order of their business, will be found in Appendix C.

The dietary followed is similar to that adopted in other District Model Schools; but hitherto the Head Master has not adhered strictly to the prescribed quantities, having exceeded in most articles the allowance laid down for each pupil.

Besides these Pupil-Teachers, there are three agricultural boarders, for each of whom the Head Master receives from the Commissioners an allowance of £16 a year, and who take their meals, study, and receive some instruction from him along with the resident literary Pupil-Teachers. One of them has a free place, having been appointed from the Rahan Agricultural School; for the others a sum of £6 per annum is paid to the Board. The agricultural boarders are engaged for the greater part of the day upon the farm, under the superintendence of the Agriculturist, and they have but a short time each day to give to their literary business. Their answering on the subjects on which I examined them was, consequently, very indifferent, one of them not having been able to answer a single question during the examination.

The agricultural boarders and the Pupil-Teachers receive a lesson every day from the Agriculturist, and it is intended that the latter shall be employed under him on the farm for a short time, whenever this can be done without undue interference with the school duties. As they will not remain more than one year in the establishment, and as they can spare but very little time from their school business, it appears to me that the allotment to each of a small plot of ground, on which he may be instructed in the best modes of cultivating and managing a garden, will contribute more to his future well-being than his being set to work upon the farm for an hour or so a day.

Agricultural Class.

Agricultural Class.—The Agriculturist also gives a short lesson daily to the more advanced boys of the School, 12 of whom form an industrial class, and are employed from 4 till 6 o'clock every evening working upon the farm. Such of these as attend regularly are paid at the rate of 6*d.* a week in return for their labour. In Appendix D is given a syllabus of these lessons, the text-books used by the Agriculturist being the Class-Book published by the Board, Murphy's Class-Book, Campbell's Cottager's Guide, and Johnstone's Catechism. I assisted at one of the lessons, at which were present 11

boys, of whom 4 belong to the industrial class, and the answering appeared to me very hesitating and unsatisfactory. I do not, however, attribute this deficiency in any way to the Agriculturist, who, I believe, has been most punctual and painstaking in the discharge of this portion of his duties; but rather to the very short period that has elapsed since the regular forming of the class, and to the limited time which the other business will permit to be devoted to agricultural instruction.

As a means of insuring a better attendance at the morning lessons on agriculture, on the part at least of the children belonging to the industrial class, I beg to recommend that a regular roll be kept of the names of the children forming the agricultural class; that this roll be called each day, and the absence of each child entered; and that no child be paid for any day unless he attend both the agricultural and industrial class.

Visitors.—The establishment has had many visitors since its opening, who have all expressed their gratification at the order and regularity observed, and the manner in which business appeared to be conducted. Among those whose names are entered in the Visitors' Book are the Marquess and Marchioness of Kildare, the Hon. F. Leveson Gower, Lord Downes, Rev. F. B. Woodward, James Gibson, Esq., Commissioner of National Education, Sir E. H. Meredyth, and Lady Meredyth. Visitors.

It has been regularly inspected by the District Inspector, Mr. O'Carroll, who has examined the children each week, and reported their progress or deficiencies to the Commissioners, and to whose care and attention, combined with the zeal and willingness of the Teachers, is principally due the satisfactory state of the School.

I have the honour to remain your obedient servant,

EDWARD BUTLER.

The Secretaries, Education Office.

APPENDIX A 1.—Attendance, School-fees, &c., from the 10th of August, 1852, to the 28th of February, 1853.

	Boys.				Girls.				Infants.				Totals.			
	Average number on the Rolls.	Average number in daily attendance.	Proportion of average daily attendance to 100 on Rolls.	Amount of School-fees received.	Average number on the Rolls.	Average number in daily attendance.	Proportion of average daily attendance to 100 on Rolls.	Amount of School-fees received.	Average number on the Rolls.	Average number in daily attendance.	Proportion of average daily attendance to 100 on Rolls.	Amount of School-fees received.	Average number on the Rolls.	Average number in daily attendance.	Proportion of average daily attendance to 100 on Rolls.	Amount of School-fees received.
1852				£ s. d.				£ s. d.				£ s. d.				£ s. d.
August,	21	19	90·8	3 0 10	4	4	100·0	0 8 4	5	5	100·0	0 6 3	30	28	–	3 15 5
September,	37	33	89·2	1 16 3	21	19	90·5	0 9 2	12	8	66·6	0 7 2	70	60	–	2 12 7
October,	61	51	83·6	1 14 1	40	22	55·0	0 6 5	19	13	68·4	0 3 4	120	86	–	2 3 10
November,	85	65	76·5	3 7 3	55	30	54·5	1 0 0	25	17	68·0	0 5 0	165	112	–	4 12 3
December,	98	73	74·5	1 15 2	50	28	54·8	0 6 6	28	12	42·8	0 6 11	176	113	–	2 8 7
1853.																
January,	105	73	69·5	3 18 8	53	27	50·9	0 12 11	32	17	53·1	0 4 11	190	117	–	4 16 6
February,	115	78	67·8	2 13 11	57	28	49·1	0 16 10	32	15	47·0	0 6 5	204	121	–	3 17 2
General averages and Totals,	74	56	75·2	18 6 2	41	23	56·5	4 0 2	22	13	57·3	2 0 0	137	92	61·6	24 6 4
				£ s. d.				£ s. d.				£ s. d.				£ s. d.
School expenses,				3 10 2				1 15 4				—				5 5 6
School requisites,				4 19 0				1 6 $3\frac{1}{2}$				0 5 5				6 10 $8\frac{1}{2}$

APPENDIX A 2.—RETURN of the various TRADES, &c., of the PARENTS.

Trade or Occupation.	Boys.	Girls.	Infants.	Total.
Accountant,	2	–	–	2
Agent,	–	1	–	1
Baker,	1	2	2	5
Barber,	–	1	–	1
Blacksmith,	–	1	–	1
Brazier,	–	–	2	2
Caretaker,	3	–	–	3
Carman,	2	1	–	3
Carpenter,	7	5	2	14
Chemist,	1	–	–	1
Clerk,	–	3	–	3
Clothes Broker,	2	–	2	4
Contractor,	2	1	2	5
Dealer,	–	1	–	1
Engineer,	2	–	–	2
Farmer,	24	4	–	28
Gardener,	2	–	–	2
Hotel and Inn Keeper,	1	–	–	1
Labourer,	23	13	5	41
Lock Keeper,	1	–	–	1
Locksmith,	–	1	–	1
Lodging and Public House Keeper,	3	–	–	3
Mason,	4	1	2	7
Nailor,	–	1	–	1
Nurse,	–	2	–	2
Pensioner,	6	4	1	11
Pig Buyer,	2	–	–	2
Potter,	2	–	–	2
Private (not in Business),	6	–	–	6
Process-server,	–	1	–	1
Provision Dealer,	3	–	–	3
Servant,	2	1	1	4
Schoolmaster,	–	2	–	2
Shoemaker,	4	2	–	6
Shopkeeper,	6	3	5	14
Slater,	1	–	1	2
Storekeeper,	1	1	–	2
Steward,	–	3	1	4
Tailor,	3	2	1	6
Town Crier,	1	–	–	1
Victualler,	1	–	–	1
Watchmaker,	1	–	–	1
Whitesmith,	1	–	2	3
Orphan,	–	–	1	1

APPENDIX B 1.—NUMBER of BOYS and GIRLS on the ROLLS on the 28th of February, 1853, who were learning

	Boys.	Girls.	Total.
First Book of Lessons,	21	8	29
Second do.,	31	22	53
Sequel to do.,	35	5	40
Third do.,	19	10	29
Fourth do.,	14	12	26
Elements of Grammar,	68	37	105
Syntax,	4	12	16
Descriptive Geography,	120	49	169
Arithmetical Tables,	88	45	133
Simple Rules,	49	44	93
Compound Rules,	18	10	28
Proportion and above,	32	3	35
Mental Arithmetic,	–	49	49
Writing on Slates,	23	23	46
Do. on Paper,	97	34	131
Do. from Dictation,	30	9	39
Mensuration,	3	–	3
Geometry,	2	–	2
Book-keeping,	3	–	3
Sewing,	–	52	52
Knitting,	–	2	2
Fancy-work,	–	3	3

APPENDIX B 2.—SUBJECTS TAUGHT SINCE THE OPENING.

a.—BOYS' SCHOOL.

First Class.—Have read all the First Book—in geography, know the Map of Ireland—arithmetic, have some acquaintance with tables and numeration—write on slates.

Second Class (*lower division*).—Have read in Second Book part of Section II.—in geography, know Map of Ireland—arithmetic: numeration, 4 figures; addition—tables, multiplication—write large hand on paper,.

Second Class (*higher division*).—Have read the whole of Second Book—in geography, have some knowledge of the Maps of Europe and the World—arithmetic: numeration, simple rules as far as short division—tables, multiplication—grammar, a few know noun and adjective—write on paper, round and large hand.

Sequel Class (*lower division*).—Have read Sequel No. 1, and a few lessons in No. 2—in geography, Maps of Europe and World—grammar, parts of speech—arithmetic: simple rules; some in compound rules—write on paper, round hand.

Sequel Class (*higher division*).—Have read the whole of Lesson Book—in geography, know Maps of World, Europe, and Asia—grammar, parts of speech—arithmetic: compound rules; 5 in proportion and above—write on paper, small hand.

Third Class.—Part have read the greater portion of Third Book, others only to Lesson XXX.—grammar, parts of speech, with some of the inflections—geography, Map of Europe and World—write on paper, small hand; and the greater part also from dictation—arithmetic: 3 in compound rules, the others in proportion or above.

Fourth Class.—Have read first section of Lesson Book—in grammar, know parts of speech; 4 know a little syntax—geography, Ireland, Europe, and World—arithmetic: compound rules and proportion; some are advanced as far as practice, tare and tret, and interest—mensuration, 3 can find the area of most plane figures—geometry, 2 know 18 propositions—write from dictation.

HEAD MASTER'S OBSERVATIONS.

Reading is taught with due attention to pauses and accentuation; the children are questioned on the meaning, and the difficult words and passages are carefully explained by the Teachers.

Lessons in Natural History are illustrated by the Zoological Sheets, or by reference to living instances. In reading lessons in History the map is referred to when necessary.

Spelling is taught from the Lesson Books and Spelling-Book Superseded; the words are sometimes selected, but more frequently taken as they occur.

The elements of grammar are taught in a common-sense way, as in the Dublin Model Schools. Text-books are used in the classes sufficiently advanced.

Geography is taught from maps to the junior classes, commencing with the Map of Ireland, and in the senior classes incidentally from the Lesson Books, and systematically from text-books.

Arithmetic is taught on the black-board and on slates; bills of parcels and invoices are written out in copy-books.

In mensuration the demonstrations are given on the black-board by the Teacher, and the exercises worked on slates by the pupils.

Book-keeping, as recommended in the Board's Treatise.

All the children write (in the lowest classes on slates), and while so engaged are carefully superintended by the Teachers.

---

b.—GIRLS' SCHOOL.

First Class.—First Book: reading and spelling, with explanation—arithmetic, from notation to addition—tables.

Second Class.—Reading, spelling, explanation; some to the end of the book; some to page 20—geography: Maps of the World and Ireland—arithmetic, tables—arithmetic on slates, simple rules—grammar, parts of speech.

Sequel.—Reading, spelling, and explanation—Maps of the World and Ireland—slate arithmetic, simple rules—mental arithmetic—grammar, the parts of speech.

Third Class.—Reading, spelling, and explanation—Lessons on descriptive geography—money matters—natural history—moral and religious lessons—geography: Maps of the World and Ireland—slate arithmetic—mental arithmetic—grammar, parsing easy sentences—writing on paper.

Fourth Class.—Reading, spelling, and explanation—descriptive geography, as far as America—natural history, as far as instinct of birds—writing from dictation—Spelling-Book and rules for spelling—geography: Maps of the World, Europe, England, Ireland, and Scotland—arithmetic: compound rules, reduction, proportion—mental arithmetic.

---

c.—INFANTS' SCHOOL.

First Class—Including all children learning the First Book.—Some can read and spell, while others are in their letters. They learn arithmetical tables, map of the World, writing, singing.

Second Class—Spell and read in the Second Book, with explanation—geography: Maps of the World and of Europe—grammar, the parts of speech—arithmetic: tables, simple rules, and elements of notation—writing—singing.

APPENDIX B 3.—TIME TABLE. *a.*—INFANTS' SCHOOL.

Hours.	Employment of Time.
From 10 to 10½	Singing, and calling Rolls.
,, 10½ ,, 11	Reading Lessons.
,, 11 ,, 11½	Arithmetic.
,, 11½ ,, 12	In Play-Ground.
,, 12 ,, 12½	Writing.
,, 12½ ,, 12¾	Luncheon.
,, 12¾ ,, 1¼	In Play-Ground.
,, 1¼ ,, 1¾	Singing and Marching.
,, 1¾ ,, 2½	Simultaneous Lesson.
	Religious Instruction from 2½ to 3 on Tuesday, Wednesday, Thursday, and Friday, and from 2 to 3 on Monday.
	On Saturday School closes at 12 o'clock.

APPENDIX B 3.—TIME TABLE. *b.*—BOYS' SCHOOL.

From	To	First Class.	Second Class.	Sequel Class, No. 1.	Sequel Class, No. 2.	Third Class.	Fourth Class.
H. M.	H. M.						
9 0	10 0	Play-Ground.					
10 0	10 40	Tables & Writing on Slates.	Arithmetic.	Lesson Books.	Grammar & Spelling-Book Superseded.	Geography and Lesson Books on alternate days.	Geography and Lesson Books on alternate days.
10 40	11 25	Lesson Books.	Lesson Books.	Arithmetic.	Arithmetic.	Arithmetic.	Arithmetic.
11 25	12 0	Lesson Books.	Writing.	Writing.	Writing.	Writing.	Writing.
12 0	12 30	Recreation in Play-Ground.					
12 30	1 0	Geography.	Geography.	Geography.	Geography.	Grammar or Dictation.	Grammar or Dictation.
1 0	1 45	Lesson Books.	Lesson Books.	Lesson Books.	Arithmetic.	Arithmetic.	Lesson Books.
1 45	2 30	Arithmetic.	Arithmetic.	Arithmetic.	Lesson Books.	Lesson Books.	Arithmetic, Mensuration, Book-keeping, &c.
		Religious Instruction from 2 30 to 3 on Tuesday, Wednesday, Thursday, and Friday, and from 2 to 3 o'clock on Monday.					
		Agricultural Class attend the Agriculturist every morning from 9 30 to 10 o'clock.					
		On Saturday School closes at 12 o'clock.					

TIME TABLE. *c.*—GIRLS' SCHOOL.

Time.	First Class.	Second Class.	Sequel Class.	Third Class.	Fourth Class.
From 10 to 11 o'clock	Lessons.	Writing and Arithmetic.	Writing and Arithmetic.	Lessons.	Arithmetic.
,, 11 to 12 ,,	Writing.	Lessons & Spelling.	Lessons and Arithmetic.	Writing and Arithmetic.	Writing and Spelling-Book.
,, 12 to 12½ ,,	Recreation in Play Ground.				
,, 12½ to 1 ,,	Arithmetic.	Lessons.	Geography.	Geography.	Lessons.
,, 1 to 1½ ,,	Lessons.	Maps.	Grammar.	Arithmetic.	Grammar and Geography.
,, 1½ to 2½ ,,	Sewing.				
Religious Instruction from 2½ till 3 on Tuesday, Wednesday, Thursday, and Friday, and from 2 till 3 on Monday.					
On Saturday, School closes at 12 o'clock.					

Appendix C.—Pupil-Teachers' Time Table.

Winter Half-year.

Hours.	Employment of Time.
MORNING.	
From 6½ to 7	Rise, wash, devotional exercises.
,, 7 to 8	Study Grammar and Geography.
,, 8 ,, 8¼	Open doors and windows and dust school-rooms
,, 8¼ ,, 8¾	Make up beds and dress.
,, 8¾ ,, 9	Breakfast.
,, 9 ,, 10	Make pens, attend in play-ground, &c.
,, 10 ,, 3	In School with children.
EVENING.	
,, 3 ,, 3½	Sweep Boys' School and prepare for dinner.
,, 3½ ,, 4	Dinner.
,, 4 ,, 5	Sweep Girls' and Infants' Schools, and close doors and windows.
,, 5 ,, 6	Study Arithmetic and Book-keeping.
,, 6 ,, 7	Agricultural Lecture.
,, 7 ,, 8	Geometry and Algebra.
,, 8 ,, 8¾	Lesson Books.
,, 8¾ ,, 9	Supper.
,, 9 ,, 9¼	Clean shoes.
,, 9¼ ,, 9¾	Devotional exercises.
,, – ,, 10	Lights extinguished in Dormitory.

Course of Study of Pupil-Teachers.

In Arithmetic—Vulgar and decimal fractions, commercial arithmetic.

In Book-keeping—Five sets.

In Grammar, to the end of the exercises on syntax; the rules for spelling, prefixes, affixes, frequentatives, and diminutives.

In Geography, the first eight chapters of Geography Generalized; the local geography of Ireland; the political divisions, and general geography of the continents.

Lesson Books—Principal parts of Fourth, first 16 chapters in Fifth, and 5 first eras in Ancient History.

Mensuration—Surfaces and some solids.

Euclid—Three Books.

Algebra—The first 4 Rules; reduction of fractions; equations.

Appendix D.—Subjects of Lessons given by the Agriculturist in the Athy District Model School to the Pupils residing in the house.

Practical Agriculture.

On the choice of a farm—position of farm-stead—necessity for and advantages of a central road—removal of fences—plan adopted for accomplishing this object.

Subdivision of farm according to the intended rotation—necessity for an established rotation—considerations to be taken into account when choosing a rotation—principles of rotations in general.

Appendix H.

I. Reports on District Model Schools.

Athy.

Draining—bad effects of a superabundance of moisture in the soil—beneficial effects attending its withdrawal—different plans adopted for accomplishing this object, and the best pointed out—practical execution of the work.

Subsoiling and its advantages—time and mode of execution, with its effects on drained land.

Trenching with the plough—plough and spade—spade alone, with cost—time and place in the rotation, with the beneficial effects on the soil.

House-feeding, especially with reference to dairy management—time, and mode of feeding, with general management.

Manures, general classification of—proper method of collecting, preserving, and applying farm-yard manure—necessity for collecting and applying liquid manure—quantities per acre for the different crops.

Mode of preparing land in general for the different "green crops"—method of cultivating the potato, turnip, mangel, parsnip, carrot, cabbage, bean, pea, rape, vetch, lucerne, and sainfoin—cereals.

In agricultural chemistry, they have been confined to Johnston's Catechism, which they have just completed, and they are now ready to enter upon Hodges' First Lessons on Chemistry.

Agricultural Class.—This class have been taught exactly the same course of practical lessons as the boarding class, except that the principles of rotations and draining were not so fully discussed; neither have they got on so quickly, having only reached to the cultivation of the parsnip.

Dunmanway.

No. 4.—Report on the Dunmanway District Model Agricultural School, (Literary Department), for the year 1852, by James W. Kavanagh, Esq., Head Inspector of National Schools.

Gentlemen,—I beg leave to submit a Report on the working and progress of these Schools for the past year.

Insufficient accommodation.

Buildings, &c.—No steps have, as yet, been taken to enlarge the various portions of the building, so as to afford accommodation to the pupils, or to the pupil Teachers. The entire school accommodation consists of boys' room, 30 feet by 20; girls' room, same area, and a small class room, common to both Schools. Owing to the space occupied by two desks (Teachers'), in the boys' room, the entire effective area, in both Schools, is equal to that required for 95 boys, and for 75 girls; or a total of 170, whilst the actual number present in both schools, has frequently exceeded 240 daily. The domestic portion of the establishment is wholly inadequate to the accommodation of the staff of Teachers and pupils required to conduct the Boys' School. I have forwarded detailed suggestions as to the extension of the buildings connected with the literary department.

Numbers in attendance.

Numbers in attendance.—The following table contains a

summary of the attendance for each year, since the opening of the schools :—

School.	1849 (part of). Daily average number.			1850. Daily average number.		
	On Roll.	Present.	Present of 100 on Rolls.	On Roll.	Present.	Present of 100 on Rolls.
Boys', .	81	75	92½	90	80	89
Girls', .	74	67	90½	59	54	91½
Total, .	155	142	91½	149	134	90

School.	1851. Daily average number.			1852. Daily average number.		
	On Roll.	Present.	Present of 100 on Rolls.	On Roll.	Present.	Present of 100 on Rolls.
Boys', .	112	97	86½	142	122	86
Girls', .	76	62	81½	102½	85½	83½
Total, .	188	159	84¾	244½	207½	84¾

It appears, therefore, that with the exception of a slight falling off in the Girls' School in 1850, caused by the illness of the Teacher, the numbers have gone on steadily increasing since the opening of the Schools. The daily average number on the rolls, fell off 4 per cent. in 1850, increased 25 per cent. in 1851, and the past year, as compared with the previous, shows an increase of 30½ per cent. The numbers on the roll, September 30th last, were boys 142, girls 116—total 258 ; whilst the numbers at present are, boys 102, girls 114, with 81 applicants seeking admission to both Schools. Considering the casualties of illness, severe weather, and agricultural and domestic occupations, an average attendence during the entire year, of 85 in every 100 pupils on the roll is extremely remarkable, and furnishes a high testimony of the deep importance which the parents set on the education which the Schools afford.

Ordinary National Schools.—The population of Dunmanway, by the census of 1851, is only 2,222 persons, or least, except that in Trim and in Bailieborough, of any of the nine towns in which there is a District Model School in operation. There were in the town, when the schools opened in 1849, a Parochial School, under the Protestant Rector—for boys, girls, and infants—and a National School, with a mixed attendance taught by a Master, and under the direction of the Parish Priest. Instead of interfering with the attendance in the ordinary National School, as some might have supposed, the Model Schools have, by the desire for education which they have awakened, stimulated it in numbers and efficiency. It is now in charge of two female Teachers, and who receive from the Commissioners,

APPENDIX H.

I. Reports on District Model Schools.

Dunmanway.

in addition to the usual rate of salary, £15 in lieu of school fees, as it is attended by the poorest class, none being admitted to the Model Schools *gratis*. The children are young, and rather suited to an infants' school; the average age of 110 present at one of my visits being $8\frac{3}{4}$ years. Like the Model Schools, the attendance continues to increase :—

	1851.		1852.	
	Average No. on Roll.	Average daily attendance.	Average No. on Roll.	Average daily attendance.
Model Schools, .	188	159	$244\frac{1}{2}$	$207\frac{1}{2}$
Ordinary National Schools, . .	195	71	223	109
Total, . .	383	230	$467\frac{1}{2}$	$316\frac{1}{2}$

Since the opening of the Model Schools, three other National Schools have been opened, making altogether seven National Schools, apart from the Model Schools in the Parish, on its frontiers. There are also Protestant Schools in the rural portion of the Parish.

Rates of Payment.

Rates of Payment.—The amount of school fees received, continues to increase, and some of the parents who are in better circumstances, when the time for renewal of their children's quarterly fee arrives, have sent unsolicited, the five shilling rate, although before paying the half-crown rate for their children. The following table shows the annual fees from the opening of the Schools :—

School.	School Fees received in								
	1849 ($4\frac{1}{2}$ months).			1850.			1851.			1852.		
	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
Boys', . . .	19	9	5	34	1	9	41	14	6	50	16	5
Girls', . . .	11	16	4	19	9	7	21	4	1	28	2	4
Total, . .	31	5	9	53	11	4	62	18	7	78	18	9

The school fees increased $17\frac{1}{2}$ per cent. in 1851, as compared with 1850, for 1852, 25 per cent. on previous year, and for 1852, as compared with 1851, an increase of $47\frac{1}{2}$ per cent. Each child on the roll paid, at an average, 6*s* 6*d*. per year, for its tuition, or $1\frac{1}{2}d$. per week each, during 1852.

School requisites.

School Requisites.—The sale of books, &c. to the pupils,

continues to increase; that for 1852, above 1851, being 29 per cent., as appears from the following return :—

School.	Amount of School requisites sold to Pupils at reduced rates in											
	1849 (4½ months).			1850.			1851.			1852.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Boys', . .	8	7	7	11	7	1	11	9	2¼	19	6	9¼
Girls', . .	2	5	4¼	4	0	2¾	3	10	10½			
Total, .	10	12	11¼	15	7	3¾	15	0	0¾	19	6	9¼

Social Grades of Children.—Reference to the Appendix (A.) will show the mixture of children of various social grades in the school. There were on the rolls, September 30th last, 84 pupils, the children of artisans, 53 of farmers and gardeners, 39 of labourers and servants, 58 of shopkeepers, professional persons, and those with private means, and 26 of various unclassed occupations.

Social grades of Children.

Religious Denominations.—Previous to the opening of the Model Schools in 1849, there was no *united* education in the town ; the ordinary National School was attended by none but Roman Catholic children, and the Protestant Parochial School, wholly or chiefly by Protestants. The Protestant Rector has never given any support or countenance to the Model Schools, nor has he given them any, except passive opposition; the Roman Catholic Clergy of the parish, and of the whole country round, have warmly encouraged them. The following table shows the proportion of pupils of each creed attending the schools :—

Religious Denominations.

Religion.	Number of different Pupils admitted to the Schools in				
	1849 (4½ months).	1850.	1851.	1852.	Whole period to 31st Dec. 1852.
Protestants, .	12	9	19	19	59
Roman Catholics,	208	136	149	107	600
Total, . .	220	145	168	126	659

In the first year the number of Protestant to Catholic pupils was 1 to 17 ; the second year, 1 to 15 ; the third year, 1 to 8, and the past year, 1 to 5½ ; or on the aggregate of admissions for the whole period, 1 to 10.

Religious Instruction.—The arrangements for the separate religious instruction of the children continue, as before reported. The Second Master, who is a member of the Established Church, instructs the Protestant children in a Scripture class ; the

Religious Instruction.

APPENDIX H.

I. Reports on District Model Schools.

Dunmanway.

Roman Catholics are taught by the Teachers, and Pupil-Teachers of their church, and on one day in the week, Rev. Mr. Kelleher, P.P., or one of his curates, attends to instruct and examine them. The Protestant clergymen have never attended to give religious instruction.

Literary Instruction. Boys' School.

Boys' School.—The Appendix (B.) shows the classification of the pupils, and the numbers learning each branch of instruction. So backward was the state of education, that efficiently as the Schools have been conducted, the Teachers have not yet, after nearly four years, been able to form a fifth, or highest class. Mr. Simpson, District Inspector, and I, examined the various classes the week previous to the Public Examination held in July, and we had reason to feel entirely satisfied with the steady progress made by the pupils, in all the classes, in the previous year. In addition to the branches of instruction reported on in 1851, both drawing and vocal music are now taught by the Second Master, and marked proficiency has been made in each since its introduction. The staff of Pupil-Teachers, (four), is altogether insufficient to work the School properly. I entered into this question so fully in my former report, that I deem it unnecessary to repeat the reasons against its continuance which I then advanced, and shall merely add, that the number of pupils increased 25 per cent. last year; and with the highest, or almost the highest attendance in any District Model School in Ireland, the staff of Pupil-Teachers is only half what it is in those, with a far less numerous school.

Girls' School.

Girls' School.—The attendance in the Girls' School increased in 1852, as compared with that in 1851, to the extent of 37 per cent., and all its departments were similarly prosperous. The examination held by the District Inspector and myself in July, afforded us ample opportunity of testing the working of the several classes during the year, and the results were eminently satisfactory—creditable to the Teacher and to her assistants. The industrial, or work department, was efficiently conducted, although Mrs. Murphy had no assistance from a Workmistress* during the year.

Ordinary N. School.

Ordinary National School.—I examined the pupils in this school during two days, in August, 1851, (see No. 80, Tabulated Particulars). I visited several times last year, and besides his ordinary examinations, Mr. Simpson specially examined the pupils in July last, and the most deserving of them shared in the premiums awarded by the Commissioners for the Model Schools.

Public Examinations.

Public Examinations.—After the Private Examinations of the schools had closed, the Public Examinations were held on the 21st and 22nd of July. They were attended by the Roman Catholic clergy of the town, and some of those from the neighbouring parishes, and by a very considerable number of the parents of the children. Classes were examined in the several branches taught in the schools, including the agricultural class; and at the close of the second day, premiums,

* A Workmistress has been recently appointed.

consisting of books, engravings, certificates, &c. amounting to £10, were presented to the pupils who had shown greatest merit at the Private Examination of their classes. The pupils of the Auxiliary National School in the town were present under their two Teachers, at the Model Schools, and the most deserving of them were partakers of the premiums granted by the Board. Altogether there were 500 children present, or at least five-fold the number of pupils in the Ordinary National School three years before, when the Model Schools were opened.

Cork Industrial Exhibition.

Cork Industrial Exhibition.—In my Report on the Clonmel Model Schools (page 80), there is an account of the visit to the Cork Exhibition of the Teachers, Pupil-Teachers, a few of the senior pupils, two agriculturists, and four agricultural boarders; in all, 31 persons—sent there under the direction of the Inspectors, at the expense of the Commissioners. Of the party, 12 were from Dunmanway Model School; and as six of these were connected with the agricultural department, I beg leave to add a few words in relation to their visit. Had the suggestion made in my last report on this Model School been adopted, as sooner or later it must, if we are to teach *principles* as well as processes, how different would be the influence of the Exhibition on these young men. In the absence of even the rudest instruction in elementary mechanics, how are they to consider the economic yoking of draught animals, much less comprehend the entire range of agricultural mechanics and machines.* Pass from the sickle, the flail, the sieve, and the churn-staff, to the reaping, the thrashing, the winnowing, and the churning machines—in all the grades, from rude implements to steam-engines—instruction in the principles and application of mechanics is desirable for the farmer, but absolutely necessary for those who would instruct others in the principles of scientific agriculture. Limited as was the extent of the Cork Exhibition, it contained quite sufficient, connected with agriculture, to show us that scientific instruction in this most important branch of our National Industry must be attempted on a far broader basis than has yet been done in Dunmanway, or similar establishments. Besides improved implements for various agricultural purposes, there were bruising, cutting,

Scientific Instruction in Agriculture.

* In the Jurors' Report on the Agricultural and Horticultural Machines and Implements, (Class IX) of the Great Exhibition in 1851, drawn up by P. Pusey, Esq., M.P., F.R.S., the following most important deductions are drawn:—

1. That the application of machinery to the main branches of farming labour, taken together, has effected a saving on outgoings, or an increase on incomings, of not less than one-half.

2. That new agricultural machines have, with reference to the amount of saving produced by them, the merit of very great cheapness.

3. That machinery has given farming what is most wanted, not absolute, indeed, but comparative certainty.

The Committee of Class IX, of which Mr. Pusey was Chairman and Reporter, included some of the most eminent Professors and Agriculturists in the United States, France, Belgium, the Zollverein, Austria, and Great Britain.

and steaming machines, in all variety; but to understand how they, to some extent, are the first stomach of an ox, and partially perform the maceration of the food, required some previous knowledge of the first principles of animal physiology, without which, the animal economy of these substitutes of dead for livings organs, as proposed by Liebig, could not be appreciated. The extensive collection of rocks, illustrative of the vast and varied field upon which the soil of Ireland rests, and from which its ingredients were chiefly drawn, was a mere object-lesson in geology, the counterpart of which, on a small scale, should have been in Dunmanway and every similar institution, as well as it is in Clonmel. The claims of chemistry to a large share of attention in the instruction of the scientific agriculturist are disputed by none; we find, however, that frequently it is forgotten that it is not so much a deductive as an *experimental* science. Previous to experiment, no person could by possibility predicate that the pure fibre of flax contains scarcely any ash, while the water in which the stalk was steeped, contains 40 per cent.;* or, that a pound of pure wool requires for its production, the assimilation in the sheep of $3\frac{1}{2}$ times as much nutriment as a pound of mutton, although both wool and mutton have the same elementary composition, yet, the utilization of apparently refuse materials connected with the treatment and manufacture of flax depends on the former, while the latter shows the grazier the necessity of some modification of the present practice of encouraging early maturity and tendency to lay on fat in his sheep, if growing wool be, as it is, fully as important as growing mutton. While it would be foreign to the object of our Model Schools to undertake or enter on chemical investigations or analyses which would require expensive apparatus, on the other hand, it is not too much to expect that each shall be provided with such simple apparatus as would be necessary to illustrate the lessons in the Fifth Book, Hodges' Agricultural Chemistry, and the more elementary chemical sections of Professor M'Gauley's work. So long as this is not supplied and used, the example to the ordinary National Schools is highly pernicious, and tends directly to encourage pretentiousness, and the substitution of *words* for *things*, in all their teaching.

One of the Deputy Commissioners of the Great Exhibition of 1851—J. Wilson, Esq.—and who lately filled the office of Principal of the Royal Agricultural College, in his lecture on the Agricultural Products and Implements of the Exhibition†, says, "That reverence for the past, peculiar to agriculture, so fine in morals but so fatal in mechanics, must be considerably modified. *Principles* must be understood and observed, as well by the constructors of implements, as by those for whose use

* Kane's Industrial Resources of Ireland.

† Lectures on the Results of the Great Exhibition. Lecture xiii., vol. ii., page 39.

they are designed. The Exhibition brought the man and the machine together under the same roof, and thus enabled him to look upon his iron substitute with his own eyes. . . . We have sown the seed—let us not be laggards in our preparations for the harvest. The most important and urgent of these, I believe, is to amend the defects in our system of education—our instructional course needs remodelling. Centuries have rolled over us, yet the teaching of our Schools is much the same—let us ask that this be changed. Let us ask that the laws of Nature be taught as well as the literature of man, and that the literature of the present be admitted to equal claims with the lore of the mythic past."

Pupil-Teachers.

Pupil-Teachers.—Owing to the twofold object of this Model School—literary and agricultural—the eight places for Pupil-Teachers and agricultural boarders are equally divided, so that there is domestic accommodation for only four Pupil-Teachers. As noticed in my last Report, the evil arising from this insufficient teaching staff is not confined to the Model School itself, but also affects the entire district, as there are fewer of these rewards open to deserving and hopeful Paid Monitors and pupils; and we are unable to send out to the country Schools a sufficient number of trained Pupil-Teachers to meet the demand for them by the Managers. Of the 13 Pupil-Teachers who entered and left the Model School up to December 31st (Appendix C), three remained only a few months, and left to enter on other pursuits, and all the remainder are connected with National Schools. Two of them have charge of Schools in the most important towns in the West Riding of Cork—Bandon and Bantry—and although the latter already contained two National Schools, the new one opened for the children of tradesmen, shopkeepers, and others, and conducted by a late Pupil-Teacher, produces at the rate of £50 school-fees. Of 15 Pupil-Teachers admitted to March 31st last, all were Roman Catholics except one; 13 were from County Cork, one from Antrim, and one from Tipperary; and all had been pupils, and some of them Paid Monitors in National Schools.

Pupils who have got charge of Schools.—Nothing could more strikingly exhibit the estimation in which the Model Schools are held by the Patrons of Schools, and the high opinion entertained of the moral character and superior efficiency of those trained in them, than the desire shown to secure for their own Schools the services of trained Pupil-Teachers, when they can obtain them, and failing this, of pupils taught in the Model Schools. Appendix D contains a list of 15 pupils who have got charge of Schools in various parts of the country; of these 5 have already been examined and classed, 9 are awaiting this year's examination, most of them having been only recently appointed, and one emigrated. Each had been, at an average, 12 months a pupil in the Model School; all of them are Roman Catholics; 3 of them were appointed to Schools in 1850, 3 in 1851, 7 in last year, and 2 in the early part of 1853. There were 16 agricultural boarders admitted from the opening

Appendix H.

I. Reports on District Model Schools.

Dunmanway.

of the Schools, 6 of whom had been pupils of the Model School; of the total number, only 8 are yet connected with the Commissioners, and 5 of these belonged to the Boys' Model School.

Paid Monitresses.

Paid Monitresses.—Of 11 Paid Monitresses appointed since the opening of the Schools, 4 have got charge of Schools, 2 emigrated, 1 removed with her family to Cork, and 4 are yet in the establishment.

Pupils who have got charge of Schools.—Seven pupils have been appointed to Schools in the neighbourhood; and of the 11 Teachers under both heads, 6 have been examined and classed, and 5 await this year's examination. See Appendix E.

It appears that in less than four years, and working under the greatest disadvantages from insufficient school room, insufficient teaching staff, and insufficient domestic accommodation, we have sent out to National Schools 25 Masters and 11 Mistresses, all of whom, with one exception, are yet connected with the Board, and 21 of whom have been already examined and classed. In nearly all of these cases the parties were nominated to the Schools they conduct by the Board's Inspector, on the application of the Managers of the Schools, and in no instance has even the slightest complaint reached me against one of these Teachers; on the contrary, their moral conduct, zeal in the discharge of their duties, and efficiency in their Schools, are most favourably reported on by both Managers and Inspectors. The 36 Teachers include 10 Pupil-Teachers, whose board and lodging in the house for a year was defrayed by the Commissioners; 4 who had served as Monitresses at the rate of £4 per annum, and 22 who were pupils at the Schools, paid for their own tuition, and obtained the charge of Schools without any expense to the Commissioners. In addition to the above, 4 Pupil-Teachers and 4 Monitresses are still in training in the establishment.

Visitors.

Visitors.—There was a considerable number of visitors during the past year, and I understand all of them were much pleased with the Schools. I beg leave to submit the following copies of some of the observations left in the Visitors' Book:—

"I have visited Dunmanway School this day, and consider it is conducted in a very efficient manner; the pupils, for their age, seem far advanced, and extremely orderly.

(Signed) "George Purcell Atkins, M.P.

"April 20, 1852."

From the two members of parliament for Cork County:—

"We have this day visited the Dunmanway District Model School, and have heard several of the classes examined, and were much gratified with the style of answering, as well as with the general appearance and management of the establish-

ment. We think it reflects much credit upon the Superintendents.

(Signed) "E. B. ROCHE.
"VINCENT SCULLY.

"July 14, 1852."

Dunmanway.

"I have visited this School, and am extremely pleased with the general appearance of order and discipline, and with the intelligence of the children. I have never seen a School of the kind which has more pleased me.

(Signed) "E. B. VAUGHAN,
"District Inspector of Schools,
Diocese of Bath and Wells.

"August 17, 1852."

This clergyman is Manager of several National Schools:—

"I have heard several classes examined by the Masters of this Model School, and feel much pleasure in recording my high appreciation of the system pursued, and admiration at the progress made by the pupils in many branches of useful learning. The whole thing seems destined to work a great reformation in the district about Dunmanway.

(Signed) "MICHAEL ENRIGHT, P.P.,
"Castletown Bere.

"Sept 6, 1852."

Conclusion.—The general change in the circuits of the Head Inspectors, withdraws me from Munster, and from the direction, under the Commissioners, of the Dunmanway Model Schools. The influence which these Schools have exercised on the public mind in a large tract of the south-west of Ireland, can be estimated very inadequately indeed from the facts and statistics collected in this Report. Highly important as is its utility as a superior School for the small town of Dunmanway, its influence on the country 30 miles round it is of still greater consequence to the National System. Within the past year 49 pupils, 26 boys and 23 girls, were sent from distances ranging from 4 to 30 miles, to board and lodge in the town and vicinity, in order to attend the Schools. Those who will take the trouble to make honest inquiry, will see, in the working of this establishment, phases of the Irish character that must inspire high hope of the future. Jealous of the preservation of their religious faith, the native Irish stood aloof from the education afforded in Schools wherein they feared it would be imperilled; but instinctively hating illiteracy, the hedge-schools rose to supply the rude elements of letters. The earlier National Schools in the south-west, as might have been expected, were but these somewhat improved; and from the establishment of the District Model Schools alone may be dated the permanent localization of the National System in a form which enables the whole community to see the honesty of its

Conclusion.

spirit, the soundness and extent of its intellectual aims, and the fulness of the opportunity which it affords for the separate religious instruction of all creeds under it. Its attempt to secure a united secular education to children of all creeds and of different social grades has been crowned with complete success, even under disadvantageous circumstances; the hereditary craving for learning, and the generosity which made the south the asylum of the pilgrim "*poor scholar*," yet live in the peasantry, and here, in one of its poorest districts, the parents pay, in the two small Schools, £100 a-year for better books and superior instruction. The 36 young Teachers who have gone out in various directions in charge of Schools, are gradually elevating their office and its efficiency in public estimation. The ordinary Schools which they conduct, and the Model Schools where they were trained, thus act and react on each other, as mutual stimulants, in the struggle for progress; and while the whole community attests the marked and visible results which have, in so short a period, been produced by the Model Schools, every real friend to popular enlightenment admires the wisdom which devised, and the justice and impartiality which direct this new and important scheme in the National System. It is not in human nature to subdue the tendency of the heart to feel grateful for such substantial benefits as these institutions confer on the mass of the people; and I have not the least doubt that all ranks and classes who share in them, entertain such feelings towards Parliament for the justice of the grant, and towards the Commissioners for its wise administration.

We have had sufficient experience of the practical working of the nine District Model Schools now in operation, to enable us to observe a result which might have been easily anticipated—that the Model, like all other Schools, will assume special aspects, arising from local circumstances, and, beyond the common principles of the National System, that uniformity in their every department and detail is neither practicable nor desirable. Those in small towns, as Dunmanway and Bailieboro', are suited to the adjunct of a farm or agricultural department; those in large maritime towns, as Cork or Belfast, to a department for instruction in navigation and nautical science. All those that are in towns of over 5,000 inhabitants, should have classes in drawing; and in those with 10,000 inhabitants each, to have an elementary school of art in connexion with the schools of design. In towns like Clonmel and Newry, and in cities, each to contain a classical branch, affording instruction in Latin, Greek, and modern languages; the principles of the physical and applied sciences to be taught in every Model School in a town of considerable population, and with special reference to the wants of the locality—as, in Belfast, to the manufacture of flax and textile fabrics, and in Galway to the fisheries. The female department in each should also reflect the local wants, the plain sewing, knitting, and homely thrift of the School in a rural locality, being represented in towns by the addition of

fancy work, embroidery, drawing, and higher instruction in domestic industry, suited to the higher social wants of the community. To force agricultural instruction on the sons of artizans and sailors in large towns, or to put the sextant instead of the plough into the hands of a young farmer, is too absurd to be entertained. Ireland, while chiefly agricultural, possesses many other active branches of industry; and in the *principles* of all, instruction should be given in Model Schools to which each is best suited. Such a course would, more than any other, "tend to soften down that antagonism of interests which has been supposed to exist between the manufacturer of corn and other manufacturers; their identity of interests would become more evident; and instead of murmuring at, they would rejoice, because they would share each other's prosperity—they would see that every flight of the shuttle must be followed by a blow of the sickle, and that every revolution of the mill-wheel must tend to drive the plough deeper into the soil."* In this manner the Commissioners would, in my humble opinion, most effectually help to develop the greatest number of our industrial resources, and would act most in conformity with the industrial idea of the age, so clearly defined by His Royal Highness Prince Albert:—"The great principle of division of labour, which may be called the moving power of civilization, is being extended to all branches of science, industry, and art. Whilst formerly the greatest mental energies strove at universal knowledge, and that knowledge was confined to the few, now they are directed to specialities, and in these, again, even to the minutest points; but the knowledge acquired becomes at once the property of the community at large."

Mr. Simpson, like myself, has now, owing to change of district, ceased connexion with the Model Schools; and to his judgment and attention they are largely indebted for their present efficient condition. It would be impossible for me to exaggerate the merit of Mr. and Mrs. Murphy in the skill and assiduity which they have shown in the discharge of their onerous duties; and in the Second Master, Mr. Patterson, we have a specimen of the industry, varied acquirements, and effective teaching which the training in Clonmel Model Schools is able to produce.

I have the honour to remain, Gentlemen, your obedient servant,

JAMES W. KAVANAGH.

The Secretaries,
Education Office.

* Lectures on the Results of the Great Exhibition, Vol. II., p. 40.

APPENDIX H.

J. Reports on District Model Schools.

Dunmanway.

APPENDIX A.—OCCUPATION of PARENTS of 260 PUPILS on the Rolls of DUNMANWAY DISTRICT MODEL SCHOOLS, 30th September, 1852.

Occupation of Parents.	No. of Pupils.	Occupation of Parents.	No. of Pupils.
Attorney,	1	Nailor,	1
Butcher,	16	Orphan,	2
Baker,	1	Private Means,	8
Brazier,	1	Public Officer,	1
Blacksmith,	4	Publican,	10
Butter Merchant,	5	Policeman,	1
Clerk,	2	Pensioner,	1
Cooper,	3	Process-server,	1
Carpenter,	13	Peddler,	2
Car Owner,	8	Shopkeeper,	9
Coach Driver,	2	Shoemaker,	14
Draper,	6	Servant,	2
Dairyman,	1	Slater,	2
Farmer,	48	Sawyer,	2
Gardener,	5	Teacher,	6
Hotel Keeper,	1	Tailor,	6
Hostler,	3	Whitesmith,	1
Labourer,	30	Widow,	18
Laundress,	2	Weaver,	14
Miller,	3		
Mason,	3	Total,	260
Milliner,	1		

APPENDIX B.—CLASSIFICATION of 260 PUPILS on Rolls of DUNMANWAY DISTRICT MODEL SCHOOLS, 30th Sept., 1852.

	Boys.	Girls.	Total.
First Book,	21	36	57
Second Book,	53	38	91
Sequel,	23	19	42
Third Book,	35	14	49
Fourth Book,	10	11	21
Fifth Book,	–	–	–
Book of Poetry,	45	25	70
Elements of Grammar,	121	82	203
Parsing and Syntax,	68	44	112
Descriptive Geography,	142	118	260
Mathematical Geography,	45	11	56
Arithmetic—Simple Rules,	53	38	91
Compound Rules,	23	19	42
Proportion and above,	45	25	70
Mental Arithmetic,	121	82	203
Algebra,	10	–	10
Mensuration,	45	–	45
Geometry,	10	–	10
Book-keeping,	45	–	45
Agricultural Class Book,	45	–	45
Scripture Lessons,	68	82	150
Writing on Slates,	21	36	57
,, on Paper,	121	82	203
,, from Dictation,	45	25	70
Singing,	34	46	80
Drawing,	32	30	62
Sewing,	–	118	118
Knitting,	–	82	82

APPENDIX C.—LIST of 15 PUPIL-TEACHERS admitted from the opening of DUNMANWAY DISTRICT MODEL SCHOOL, to March 31, 1852.

No.	Name.	Age at Entrance; Years.	Religious Persuasion	Date of Entrance.	No. of Months in Training	Present Occupation.	Present Class.
1	Patrick O'Keefe,	18	R. C.,	1849, August,	4	Entered Queen's College Cork, then to Model Farm Glasnevin; emigrated,	—
2	John Radley,	16½	R. C.,	,, ,,	12	Landsdowne N. S., Kerry; now in Training, Dublin,	2 2
3	Jeremiah Horgan,	16	R. C.,	,, ,,	12	Spike Island N. S.; then on Special Class, Dublin; now in a Roman Catholic School near Bristol,	2 1
4	S. M'Inerney,	16	R. C.,	1850, February,	3	Restive under discipline; left,	—
5	Daniel Riordan,	16	R. C.,	,, June,	14	Assistant in Clonakilty National School,	2 1
6	John Begley,	16	Presb.,	,, ,,	20	Transferred to Newry District Model School,	3 2
7	Timothy Donovan,	17¾	R. C.,	,, September,	12	Shannon-street (Bandon), National School,	2 1
8	John Duggan,	17	R. C.,	,, October,	12	Went to Bantry National School,	3 2*
9	Jeremiah M'Carthy,	19	R. C.,	1851, September,	9	Left in ill health; now in Brooklodge National School,	3 -*
10	John Morton,	18	R. C.,	,, ,,	13½	Bantry, No. 2, National School,	2 1
11	John Brien,	17	R. C.,	1852, February,	13½	Ballinear National School,	3 2*
12	Denis Downing,	17½	R. C.,	,, March,	12½	On Special Class in Dublin,	3 2*
13	John Greene,	16½	R. C.,	,, August,	8½	Left to join the Navy,	—
14	William Dwyer,	18	R. C.,	,, October,	}	Both yet in the Establishment.	—
15	† Timothy Lynch,	16	R. C.,	1853, February,	}		

* Got this temporary rank until he is examined by the Head and the District Inspectors, in the District in which his School is included.
† The entire of the above were educated in National Schools. All of them are from Cork except No. 6, who is from Antrim, and No. 13. from Tipperary.

APPENDIX D.—LIST of 17 PUPILS of the DUNMANWAY DISTRICT MODEL SCHOOL who have got charge of National Schools, or who have obtained Pupil-Teacherships.

No.	Pupils' Names.	Age.	Date of Leaving.	Months a Pupil.	Now Teacher of National School.	Present Class.
1	James Murphy,	16	September, 1850,	7	Beaulad,	3[2]
2	John Lynch,	21	Septemper, 1850,	2	Dirreenlamane,	3[2]
3	John Donovan,	16	November, 1850,	6	Carrigbawn,	Probation.
4	Michael Young,	16	January, 1851,	4	Rathbarry,	Probation.
5	Jeremiah M'Carthy,	18	January, 1851,	4	Shelburne,	Probation.
6	John Mahony,	16	October, 1851,	26	Glengarriffe; since emigrated,	—
7	James Hayes,	16	March, 1852,	26	Kilmacabea,	3[1]
8	Cal. M'Carthy,	16	May, 1852,	21	Lisiviard,	3[1]
9	Charles Vaughan,	18	July, 1852,	4	Cappabouie,	3[2]
10	Timothy Connor,	23	September, 1852,	4	Drominiddy,	Probation.
11	Peter Sullivan,	18½	December, 1852,	15	Behagh,	Probation.
12	John M'Carthy,	16	March, 1852,	19	Knuckskagh,	Probation.
13	Richard Shorten,	16	December, 1852,	19	Reenagreenagh,	Probation.
14	Patrick Sullivan,	18	February, 1853,	6	Keelnagispagh,	Probation.
15	Denis M'Carthy,	16	March, 1853,	21	Gurtaleasa,	Probation.
16	John Brien,	17	—	27	Pupil-Teachers,	—
17	Timothy Lynch,	16	—	42		

APPENDIX E.—List of 11 PAID-MONITRESSES and of 7 PUPILS in DUNMANWAY DISTRICT MODEL SCHOOL, with Names of SCHOOLS, &c., to which they have been appointed.

No.	Name.	Age at Entrance.	Date of Leaving.	No. of Months in School.	Destination on Leaving.	Class.
1	Mary Crowley,	18	January, 1851,	16½	Ballusky National School,	Probation.
2	Johanna Dempsey,	14	October, 1852,	42	Timoleague National School,	3 1
3	Susan Davis,*	18	February, 1850,	5½	Resigned; since emigrated,	—
4	Ellen Leary,	18	June, 1850,	10	Emigrated,	—
5	Margaret Dwyer,	17	September, 1850,	7	Newcestown National School,	Probation.
6	Jane B. Donovan,	13	September, 1851,	15	Removed with her parents to Cork,	—
7	Mary Sullivan,	16	March, 1853,	30	Fourmilewater National School,	Probation.
8	Mary Jones,	16				
9	Johanna Browne,	16			Yet Monitresses in the Model School,	—
10	Anne Driscoll,	16½				
11	Kate O'Bryan,	18				
12	Anne Neill,†	16	December, 1849,	2	Kilcoe National School,	3 1
13	Mary Holland,	16	January, 1851,	16	Skull National School,	3 2
14	Ellen Swanton,	20	June, 1850,	1	Clonkeen National School,	3 2
15	Margaret Walsh,	18	December, 1850,	3	Bandon Workhouse National School,	3 1
16	Hannah O'Herlihy,	15	October, 1851,	12	Drimoleague National School,	Probation.
17	Kate Sullivan,	16	June, 1851,	16½	Assistant in Dunmanway National School,	3 2
18	Ellen Crowley,	17	February, 1853,	29	Ballinacarriga National School,	Probation.

* Protestant; all the others are Roman Catholics.

† The first 11 served as Paid Monitresses, the other 7 were Pupils only.

APPENDIX H. I. Reports on District Model Schools.

No. 5.—REPORT on the NEWRY DISTRICT MODEL SCHOOL for the Year ending December 31, 1852, by JAMES PATTEN, Esq., M.D., Head Inspector of National Schools.

Newry.

March, 1853.

GENTLEMEN,—In conformity with the instructions of the Commissioners of Education, I have the honour to submit this my second Report on the Newry District Model School.

Since the date of my last Report, January, 1852, the Schools have continued in a flourishing condition, and have been conducted in a very satisfactory and creditable manner.

The attendance during the past year was quite equal to the accommodation, and, during certain portions of the summer, inconveniently large, producing sometimes considerable inconvenience in the efficient management of the several classes. These remarks are applicable to the Girls' School also, but not to the same extent. Should a larger attendance be deemed desirable, the School accommodation must be considerably increased; indeed, the school-rooms are so situated that they could be greatly enlarged, and at a trifling cost. The house and premises have been minutely described in former Reports, and need not again be noticed in detail. The foundations have been laid on a noble site, the summit of a hill immediately adjoining that portion of the town where the children likely to attend most abound. During the past year, the street by which the Schools are approached has been much improved, and is kept neat and clean. Some ornamental planting on the grounds in front of the Schools has also been effected. The lively and gay appearance of the flowering shrubs during the spring and summer months will contribute, it is hoped, in some degree, with the other civilizing influences of the Schools, to create a taste, and enable the pupils to understand and appreciate the manifold forms and beauties of nature which surround them. The play-grounds are nicely laid out, well sheltered, and complete in all details for the safe and healthy recreation of the children.

Occupation of Time, &c.—The organization, occupation of the school time, programmes of study, &c., as published in the Appendix to the XVI. Report of the Commissioners, continue to be carried out with little alteration. Observing the good effects arising from a *weekly* systematic arrangement of the School business at the Bailieboro' District Model School, where it has been tried as an experiment (for particulars see my Report on the Bailieboro' District Model School for the year 1852), a similar plan will be tried in the Newry Model, which, I have no doubt, will be followed by equally favourable results.

Progressive Increase of the Attendance since the opening of the Schools.—The Schools opened on the 15th May, 1849, with an attendance of—boys, 43; girls, 27; infants, 27; total, 97.

The average daily attendance during the year 1850 was—boys, 81; girls, 77; infants, 68; total, 226.

The highest number on the rolls during the year 1851 was—boys, 120; girls, 114; infants, 120; total, 354.

The average attendance for the year 1851 was—boys, 78; girls, 72; infants, 57; total, 207; which is 63 per cent. to the number on the rolls.

Thus the average daily attendance has always been considerably above *one-half* of the highest number on the rolls. The following Table shows how the numbers stood on Dec. 31, 1852:—

NUMBER of PUPILS attending the Institution on December 31, 1852.

School.	On Roll on 31st Dec. 1851.	Admitted in 1852.	Struck off in 1852.	On Roll on 31st Dec. 1852.	Daily average attendance in 1852.	Of 100 Pupils on the Roll there were in average daily attendance.
Boys', .	120	122	124	118	78	66·1
Girls', .	110	90	96	104	75	72·8
Infants',	95	74	89	80	50	41·0
Total, .	325	286	309	302	203	59·6

It will be seen, from the above Table, that of 100 children on the rolls during the past year, the average daily attendance has been 59·6 per cent. on the highest number. The small and rather fluctuating attendance of the infants during the summer, owing to the prevalence of scarlatina, measles, &c., and the unusual severity of the commencement of winter, has diminished the average considerably in this department; but, on the other hand, if we look to the Girls' School, we find that the average daily attendance, in proportion to the highest number on the rolls, stands so high as 72·8 per cent., and the proportion in the Boys' School is 66·1.

These figures speak for themselves, and need no further comment.

Religious Instruction and Religious Denominations.—The arrangements entered into by the several clergymen for giving religious instruction, as stated in my last Report, remain unaltered. Half an hour each day of the first four days of the week is devoted to the separate religious instruction of the children, in rooms provided for each denomination; and on Fridays this instruction is given in greater detail by the respective clergymen, for one hour, to the children of their own communion. In addition to their visits on Fridays, all the clergymen are in the habit of visiting, occasionally, at the time

of religious instruction on the other days—the Teachers, while so engaged, acting merely as their deputies, and under their control and direction; and, consequently, the progress made by the children in religious knowledge, during the past year, has been spoken of by the several clergymen as truly gratifying and most satisfactory.

Every religious persuasion in the town and vicinity is represented in this institution—the attendance being composed of Protestants of the Established Church, Presbyterians, Unitarians, Roman Catholics, and Wesleyans. The following Table exhibits the number of children of each denomination:—

Religious Denominations of the Pupils, 31st December, 1852:—

	Boys.	Girls.	Infants.	Total.
Established Church,	31	30	20	81
Roman Catholics,	42	50	35	127
Presbyterians, General Assembly,	34	14	18	66
Do. Remonstrant Synod,	7	6	4	17
Methodists,	4	4	3	11
Total,	118	104	80	302

The above numbers bear a fair proportion to the numbers of the different denominations in the population; so that this Model School may be taken as a good specimen of united education in Ireland.

Rates of payment, and the proportions paying each rate, have been fixed as follows:—

	Number of Pupils paying				Annual amount of Fees, as now fixed.			Actual amount of Fees received in 1852.			School Expenses in 1852.		
	1*d.* per Week.	2*s.* 6*d.* per Quarter.	5*s.* per Quarter.	Total.	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
Boys' School,	60	40	18	118	51	0	0	45	2	8			
Girls' School,	59	37	8	104	39	5	8	26	9	10			
Infants' School,	61	19	0	80	22	14	4	16	7	0			
Total,	180	96	26	302	*113	0	0	87	19	6	†33	13	9

* The School Receipts would have been considerably increased by admitting children at the higher rates, and the Schools could be filled with this class alone; but this would not have been in accordance with the desire of the Commissioners to render these Schools accessible and adapted to the wants of the humbler classes, for whose benefit they have recommended that half the places be reserved.

† Part of the above was for work done about the premises, &c. Some items, therefore, are not strictly School expenses.

Ages of the Children attending School.—Children over 7 years of age are not admitted to the Infants' School unless under special circumstances. The ages of both sexes on the Rolls are as follow :—

Years.	Boys.	Girls.
8	45	22
9	14	22
10	16	18
11	20	10
12	15	9
13	2	7
14	2	6
15	1	3
16	–	4
17	–	2
18	3	1

Average Age of Boys, 9·9.
Do. do. Girls, 10·6.

The subjoined Table shows the occupation of the parents of the 302 children whose names were on the Rolls on 31st of December, 1852 :—

	Boys.	Girls.	Infants.	Total.
Orphans,	3	1	2	6
Children of Labourers,	6	9	9	24
Do. Mechanics,	29	21	12	62
Do. Farmers,	18	14	10	42
Do. Shopkeepers,	27	20	6	53
Do. Clerks,	5	3	16	24
Do. Miscellaneous,	30	36	25	91
Total,	118	104	80	302

It appears from the above table that the different classes in society for whose benefit the institution was established are fairly represented. In such a town as Newry, containing upwards of 13,000 inhabitants, it might reasonably be expected that the great majority of the pupils would be the children of shopkeepers and mechanics—and such turns out to be the fact; but under the head "Miscellaneous" many of the other industrial classes of the town and suburbs may be included, so that very few, if any, of that social circle for whose benefit these Schools were established, have omitted to avail themselves of their advantages; and they have now become what they were intended to be—Schools affording the advantages of a good practical English and Mathematical education, based on the soundest principles, and adapted to the various purposes of life, to the children of labourers, operative mechanics, shopkeepers, farmers, clerks, &c. The desire for education now manifested, and the punctuality and cheerfulness with which it is paid for, are the clearest indications of the return of social health and prosperity. Solon

APPENDIX II.

I. Reports on District Model Schools.

Newry.

enacted that children who did not maintain their parents in old age, when in want, should be branded with infamy, and lose the privilege of citizens; he, however, excepted from this rule those children to whom their parents had given no education, taught no trade, or provided with other means of obtaining a livelihood.

The children on the rolls are classed as follow:—

	Boys.	Girls.	Infants.
First Book,	3	–	68
Second Book,	22	32	12
Sequel,	35	22	–
Third Book,	19	22	–
Fourth Book,	20	13	–
Fifth Book,	19	15	–
Book of Poetry,	–	15	–
Elements of Grammar,	54	54	–
Parsing and Syntax,	39	50	–
Descriptive Geography,	118	104	80
Arithmetical Tables,	118	50	80
First Four Rules,	79	104	–
Compound Rules and Reduction,	39	40	–
Proportion and above,	39	30	–
Mental Arithmetic,	93	50	–
Geometry,	39	–	–
Algebra,	19	–	–
Mensuration,	19	–	–
Book-keeping,	19	–	–
Lessons on Reasoning,	19	–	–
Sacred Poetry,	79	–	80
Writing on Slates,	10	26	20
,, on Paper,	108	78	–
,, from Dictation,	108	70	–
Singing,	60	30	80
Branches for Females.			
Sewing (plain),	–	30	–
Knitting,	–	50	–
Straw Platting,	–	–	–
Fancy Work and Embroidery,	–	24	–

Destination of the Boys who have been struck off the Roll in the Newry Model School, for the Year 1852, *ending December* 31.—Of the Boys admitted during the year, 124 have been struck off. Of these

Emigrated,	8
Appointed Pupil-Teachers in the Model School, Newry,	3
In charge of a National School,	1
Apprenticed to Shopkeepers,	2
Working at their fathers' trade or other occupations,	12
Went to learn classics,	1
Bad health,	7
Enlisted,	1
Died,	1
Apprenticed to various trades,	8
Struck off for irregular attendance,	80
Total,	124

Destination of the 96 Girls who have been struck off during 1852 :—

Appointed paid Monitresses in the Newry Model School,	2
Emigrated,	5
Apprenticed to Dressmakers,	8
Employed at home,	16
Married,	1
In charge of National Schools,	2
Struck off for irregular attendance.	62
Total,	96

The destination of the Pupil after leaving School is a circumstance of great importance and interest, whether taken in a social or educational point of view ; and it would be a great additional improvement in the statistics of the ordinary National Schools, were records of this description accurately made out and carefully preserved.

Teachers, &c.—Mr. William Brady, Miss Gumerson, and Miss Fitzgerald, the Head Teachers of the Male, Female, and Infants' Schools, respectively, continue in office. They have performed their duties during the past year with great ability, energy, and faithfulness, and have given general satisfaction to the parents of the children, as well as to all parties connected with the institution. The Master is assisted by eight Pupil-Teachers who are boarded in the establishment ; and the Mistresses of the Girls' and Infants' Schools respectively, by four Paid Monitresses who assist in each School, two at a time, alternately each week ; In this way they have an opportunity of learning the organization and management of a Girls' and Infants' School at the same time. So great indeed is the competition among Managers of National Schools, for these girls, that some of them are engaged to take charge of a school before their stipulated time of service in the Model School has expired. The Monitresses reside in the town, generally with their parents or relations. The Pupil-Teachers who, as I have above remarked, are boarded and lodged in the institution, where they each remain one year. They are selected after a strict examination from the best of the Monitors and pupils in the other National Schools, are again examined after being six months on duty, and finally at the end of their year of office, when they receive their classification according to their answering, and previous conduct. See programme, and the results of the answering at the last examination in note B. appended. As in the case of the Monitresses, the Pupil-Teachers also are eagerly sought after by the Managers of Schools in want of Teachers, and are, in general, willing to engage them on favourable terms. These young persons, of both sexes, destined to be the future educators of the humbler, but, nevertheless, the wealth-producing classes of our people, are naturally objects of great interest to the philanthropist, as well as to the educationist ; and no amount of care, solicitude, and watchfulness should be spared in preparing them suitably, and rendering them worthy of their high and important mission.

APPENDIX H.

I. Reports on District Model Schools.

Newry.

Examination of Pupil-Teachers.—On the 30th November last, the eight Pupil-Teachers were carefully and minutely examined by Mr. Butler, the District Inspector, and myself, in all the branches laid down in their programme of study; and we have reason to feel satisfied with their attainments. Their answering was such as to reflect credit on their own perseverance and industry, as well as on the attention and care of the Master, in duly preparing them for the ordeal. (*See note* A.)

Examination of Monitresses.—We also examined the Paid Monitresses in their entire course of study, on the 19th November, and have much pleasure in reporting that their general answering was very satisfactory on all the branches contained in their programme. To produce so desirable a result must have cost the mistress much pains, care, and assiduity.

For details of the answering on the different branches, see tabulated particulars of the examination of Monitresses (*Note* A) appended.

Preliminary Examinations.—As it would have been almost impossible to ascertain the amount of proficiency attained by the large number of pupils in ordinary attendance, by one or even two days' public examination, especially when it became necessary to determine the relative merits of each child, Mr. Butler, the District Inspector, and myself devoted six days previously to the examination of the schools. During this period, all the children in the several departments were subjected to a minute and searching examination on every branch contained in the programme for each class respectively, which were drawn up and furnished to us by the Teachers, indicating the extent to which the several classes were prepared to be examined in the various subjects of their course. The character of the answering on all the branches was carefully marked and tabulated, to be preserved as a record; and the opinions of the Master and Mistress ascertained respecting the regularity and good conduct of the pupils before the premium, or its amount, was decided upon. The demeanour of the children throughout the entire examination was most exemplary. Instead of going into details of the manner in which the several classes acquitted themselves on the different subjects, I shall merely refer to the following *Table*, exhibiting the number examined, and the amount of proficiency attained in the several branches.

TABLE EXHIBITING PROFICIENCY—*Male Department.*

	No.	No. examined.
Able to read the Second Book and Sequel with tolerable accuracy,	35	57
Able to read the Second Book and Sequel with ease and intelligence,	20	57
Able to read the Third and Higher Books with ease and intelligence,	39	58
Acquainted with the Parts of Speech,	55	57
Able to parse,	39	58

	No.	No. examined.
Able to write a sentence from dictation with tolerable accuracy,	38	93
Able to write a sentence from dictation with ease and correctness,	25	93
Able to work a sum correctly in any of the four Elementary Rules,	30	57
Able to solve, with readiness and correctness, Questions in Proportion, Practice, and the ordinary Rules of Commercial Arithmetic,	19	58
Able to write fairly,	58	118
Able to write a good hand with ease and freedom,	39	118
Able to answer fairly on the Map of the World,	19	39
Able to answer fairly on Mathematical and Physical Geography,	39	39
Possessing a respectable knowledge of the principles of Spelling,	30	39
Acquainted with the great Outlines of Natural History,	19	39
Possessing a tolerable knowledge of three Books of Euclid,	19	19
Fairly acquainted with the Mensuration of Superficies,	19	19
Acquainted with the Elementary Rules of Algebra,	16	19
Able to solve Questions in Simple Equations,	16	19
Acquainted with the Two first Sets of the Board's Treatise on Book-keeping,	19	19
Acquainted with the Easy Lessons on Money Matters,	39	39
Acquainted with the Easy Lessons on Reasoning, (part I.),	19	19

TABLE EXHIBITING PROFICIENCY—*Female Department.*

	No.	No. examined.
Able to read the Second Book and Sequel with tolerable accuracy,	24	54
Able to read the Second Book and Sequel with ease and correctness,	30	54
Able to read the Third and Higher Books with ease and intelligence,	28	50
Acquainted with the Parts of Speech,	54	54
Able to parse,	28	50
Able to write a sentence from dictation with tolerable accuracy,	30	50
Able to write a sentence from dictation with ease and correctness,	20	50
Able to work a sum correctly in any of the four Elementary Rules,	36	54
Able to solve with readiness and correctness, Questions in Proportion, Practice, and the ordinary Rules of Commercial Arithmetic,	15	28
Able to write fairly,	50	104
Able to write a good hand with ease and freedom,	30	104
Able to answer fairly on the Map of the World,	104	104
Able to answer fairly on Mathematical and Physical Geography,	28	50
Possessing a respectable knowledge of the principles of Spelling,	50	64
Acquainted with the great Outlines of Natural History,	30	50
Possessing some acquaintance with English Composition, and able to write a letter fairly,	20	28
Acquainted with Plain Sewing, Shirt and Dress-making,	20	28
Acquainted with Fancy Work,	26	30
Acquainted with Flowering, Sewed Muslin, &c.	6	10

Public Examination.—This examination was held on the 21st & 22nd of December, immediately preceding the Christmas holidays, and was witnessed by a numerous auditory, consisting of the clergy of the different denominations residing in the town and vicinity—the gentry, mercantile classes, and the parents and friends of the pupils. As on the former occasion, the infants' school-room was selected as the best adapted for the accommodation of the puplic who were invited to attend at half-past ten o'clock, at which hour, or shortly after, the room became crowded.

There were in attendance at the examination 84 boys, 82 girls, and 46 infants. As on the last occasion, the examination was superintended by Mr. Butler, the District Inspector, and myself. We considered it desirable that the parents and relatives of the children, as well as the public, should have an opportunity afforded of witnessing the style, manner, and method of examining of the Teachers, Monitors, and Monitresses in this institution; and arrangements were made that the Master, Mistresses, Pupil-Teachers, and Monitresses should examine publicly one or more classes. In accordance with this arrangement, the classes in the Boys' School were examined by Mr. Brady, assisted by three Pupil-Teachers—subjects: reading, spelling, and derivations; grammar and parsing; arithmetic, theory and practice, mental ditto; natural history, English history, history of the Hebrew nation, political economy, geography, mechanics, Lessons on Reasoning, Euclid, and algebra. The subjects being so numerous, a small portion of time only could be allotted to each. The girls were examined by Miss Gumerson, the Mistress of the Female School, assisted by two Monitresses. Subjects: reading, rules of spelling, grammar and parsing, geography, English history, and mental arithmetic. The infants were examined by Miss Fitzgerald. At the close of the examinations, which appeared to afford much satisfaction to all present, specimens of the writing were exhibited—many of them were beautifully executed; also samples of work from the industrial department of the Female School: the specimens of sewing, knitting, and various kinds of fancy work, were unexceptionable in neatness and finish. The girls sometimes bring their own material, and articles of their own dress are made-up in the School: the Mistress keeps this department in a high state of order and efficiency. It is unnecessary to allude to the vast importance of a competent knowledge of this branch, in all its details, to the rising generation of females, especially when at the present time it can be turned to so good an account in the way of emoluments.

Extra branches in which improvement has been made since the date of my last Report.—Book-keeping, political economy as contained in the Easy Lessons on Money Matters; geometry, algebra, and the Lessons on Reasoning, 1st part. On the two latter subjects, the progress has been very marked and rapid. Ten *simple equations* were proposed, of different degrees of

difficulty, some of them being new to the class—all were solved on the black board with much readiness and correctness, and the reason of the several steps in the process of solution clearly explained, so as to become level even to the comprehensions of persons unacquainted with the subject. This is the way in which algebra and arithmetic should be taught, not so much by *rules* as by *principles* from which the rules are readily deduced. Good progress has been made in mensuration, and its application to the requirements of the several trades—*i.e.*, the measurement and cost, &c., of carpenters', masons', slaters', painters', and glaziers' work, &c., &c.

In my last report, I remarked, in a note, that the Pupil-Teachers and scholars were greatly assisted in their studies by abstracts and synoptical tables of the higher branches, drawn up by the Head Master, with the view of placing before his pupils in a concise and connected form, the great outlines of the subjects of which they treat. Many in this way derive a lasting impression of several branches, of which, owing to the short time they can remain at school, they must otherwise have remained ignorant.

Premiums.—The £10 placed at our disposal by the Commissioners to be awarded in premiums to the most deserving pupils who had been distinguished for proficiency and general good conduct, were distributed on the 22nd December, in the presence of the clergy, and the parents and relatives of the pupils. The amount of the premium was paid in money, in order that the children might have an opportunity of consulting their parents, &c., as to the description of books, &c., advisable to be purchased. The premium was accompanied by a certificate on parchment, setting forth the class to which the recipient belonged, and the subjects for which the premium was awarded. See note below.

FORM OF CERTIFICATE.

Newry District National Model School.

At the Annual Examinations of the pupils, held in this institution on the — day of ——, 185 , ——— distinguished —self for superior answering in — class, and for general good conduct; for which this Certificate, with a Premium of ——, has been awarded to —— by us.

———, Head Inspector.
———, District Inspector.

PREMIUM LIST (MALES).

	£	*s.*	*d.*
* First Class.—Two premiums at 3*s.* each, . .	0	6	0
Second Class.—Two premiums at 3*s.* each, .	0	6	0
Sequel Class.—Six premiums at 3*s.* each, . .	0	18	0

* N.B.—The first class is the junior or lowest in the school, and the fifth the senior or most advanced. It is necessary that this be understood, as in some schools (not National) the first class is the highest.

APPENDIX H.

I. Reports on District Model Schools.

Newry.

	£	s.	d.
Third Class.—Four premiums, at 3s. each, .	0	12	0
Fourth Class.—Four premiums, at 4s. each, .	0	16	0
Fifth Class.—Four premiums, at 5s. each, .	1	0	0
Drawing Class.—Two premiums, at 3s. each, .	0	6	0
	£4	4	0

(FEMALES.)

	£	s.	d.
First Class.—Three premiums, at 3s. each, .	0	9	0
Sequel Class.—Four premiums, at 3s. each, .	0	12	0
Third Class.—Three premiums, at 3s. each, and one at 2s. 6d., ...	0	11	6
Fourth Class.—Five premiums, at 3s. each, one at 2s. 6d., and three at 2s. each, . . .	1	3	6
Fifth Class.—Four premiums, at 5s. each, and one at 2s., ...	1	2	0
Work Class.—Four premiums. at 4s. each, .	0	16	0
Drawing Class.—Two premiums, at 3s. each, .	0	6	0
	£9	4	0
Confectionary for Infants, ...	0	16	0
Amount, . .	£10	0	0

Vocal Music.—Hullah's system continues in operation, and is taught by Mr. Brady, the Head Master, to all the pupils of both male and female departments. The intervals between the examinations of the different classes were agreeably filled up by the singing of the following pieces by a select class of boys and girls, who sing in parts, "The Evening," "Canadian Boat Song," "The Robin," "The Hardy Norseman," and the "National Anthem."

Drawing.—In my report on the Schools for 1851, I recommended that a Drawing Master should be appointed; and that drawing, both linear and from solid models, should be made a portion of the daily instruction in the Schools. In a short time after the Commissioners were pleased to accede to that recommendation; and, in January last, appointed a competent Teacher, Mr. Nicholas Brophy, who had been principally educated in the Central Model School, and subsequently, I believe, received further instructions in the Dublin School of Design. The pupils have made fair progress under his instructions. For a statement in detail, see Mr. Brophy's Report attached, Appendix B.

Visits of the Clergy.—Before closing this report, I would consider it a serious defect if I did not acknowledge, in the warmest terms that official language will admit of, the manifold advantages and cordial support which these schools have received from the constant and regular visits of the clergy, in giving religious instruction to the children of their respective churches; and with so much success, that at present the answering of the pupils on this most important subject is not inferior to that exhibited by them at the examinations on the ordinary school branches.

In concluding, I beg leave to assure the Commissioners that

this institution continues to be efficiently conducted in every department, and has faithfully carried out the objects and views of the Board; it has likewise secured, in an eminent degree, the confidence and support of the clergy of all denominations, and has taken a deep root in the hearts and affections of the people.

I have the honour to remain, Gentlemen, your obedient servant,

James Patten,
Head Inspector.

The Secretaries,
Education Office.

Appendix A.

A Report on the Drawing lately introduced into the Newry District Model School by Nicholas A. Brophy, Drawing Master.

13th April, 1853.

Sir,—In compliance with the instructions contained in your letter to the Head Master, I beg leave to submit to you the following report.

Drawing was introduced by me into the Newry District Model Schools on the 16th of January, 1852, and I have continued giving instructions up to the present date. That you may not fall into error when considering the progress which the pupils have made during that time, I beg leave to state, that during the first five months I spent in teaching drawing here, I had not the necessary drawing requisites, being in want of the models which the pupils were to draw from, and the model stands to hold the models. I wrote for them, after waiting some time, and received an answer from the Secretaries, saying, "that the models were in hands, and would be sent when ready." During the time I was waiting for the models, I had the pupils practising outline drawing on the black boards,—a most useful exercise, as it gives a certain freedom of hand very necessary for the proper cultivation of drawing, and which is rarely (if ever) acquired by the pupil who commences at once to draw on paper.

The total number learning drawing at present amounts to 74, of whom 14 are teachers, 30 boys, and 30 girls.

Proficiency.—The knowledge which the pupils have of drawing varies so much, that each pupil would require to be classed separately by him or herself; but as this would be a useless waste of time, I will report the proficiency of some of the best, and also some of the worst. Some of the boys who have been in the class for some time, have gone through a course of model drawing, and understand the first principles of perspective, and also the principles of light and shade; while others who have been admitted into the class lately, are

practising line drawing on the black boards. Some of the Pupil-Teachers can draw very nicely, especially a lad of the name of Brien, who would be able (if allowed to practise for about a year longer) to give some instructions in model drawing. Some of the girls can draw landscape very nicely indeed, others of them practise outlining ornament on the black boards.

Character, style, and nature of the drawing taught.—The system of drawing which has been introduced into these schools is called model drawing, and is the same system as that which has been adopted in the Central Model School. Its most characteristic feature is the synthetical arrangement of the lessons. The pupil commences to draw from the most simple objects first, such as a cube, parallelopipedon, &c., and then proceeds to others more complex, until he has completed the course, the last or most difficult model being the screw.

In this system of drawing, the pupil commences at once to draw from solid objects, which gives the Teacher an opportunity of demonstrating the rules which account for the apparent changes of appearance which an object presents to the pupil, when either the object is moved, or the pupil changes his position. In other systems of drawing the Teacher has not this opportunity, because the pupil commences to draw from copies, and is merely taught to represent, mechanically, certain effects of light and shade placed in true perspective. By this means the hand alone is exercised, and the pupil fails to acquire a habit of observing and seeing correctly, and is, therefore, unable to represent the most simple objects, after studying drawing from copies for years, perhaps.

Utility of Drawing.—Of the utility of drawing I think it scarcely necessary for me to speak; because if we only look around us, we cannot but discern what immense advantages would be derived, by all classes, from the cultivation of an art which tends (when properly cultivated) not only to improve the knowledge of the mass of the people, but also to elevate and improve the tone of their moral character.

Now, as regards the utility of drawing to the working classes, or those engaged in different works of industry, there cannot be the least doubt; because tradesmen, such as carpenters, smiths, engineers, and a host of others employed in works of construction, cannot, if they do not understand plans and drawings, execute properly the orders for different kinds of work which they would be likely to receive; and it is only after years of blundering that room-painters, decorators, upholsterers, cabinet-makers, stucco-plasterers, stone-cutters, &c., learn to understand and appreciate the drawings and sketches of the different sorts of work which they are required to perform. To the engineer or the tourist, drawing is a species of language which is almost indispensable. To those engaged in the study of the physical and natural sciences, such as astronomy, geology, anatomy, zoology, botany, &c., it is nearly an indispensable auxiliary.

I will conclude what I have to say on this point by quoting a passage in Locke's Thoughts on Education, which shows the degree of importance attached to a knowledge of drawing by that distinguished philosopher: "When he (the pupil) can write well and quick, I think it may be convenient not only to continue the exercise of his hand in writing, but also to improve the use of it further in drawing; a thing very useful to gentlemen on several occasions, but especially if he travel, as that which helps a man often to express in a few lines well put together what a whole sheet of paper in writing would not be able to represent and make intelligible. How many buildings may a man see, how many machines and habits meet with, the ideas whereof would be easily retained and communicated by a little skill in drawing, which being committed to words are in danger of being lost, or, at best, but ill retained in the most exact descriptions? I do not mean that I would have your son a perfect painter: to be that to any tolerable degree will require more time than a young gentleman can spare from his other improvements of greater moment; but so much insight into perspective and skill in drawing as will enable him to represent tolerably on paper anything he sees, may, I think, be got in a little time."

The probable time that would be required for a pupil of ordinary application and ability to acquire a useful and practical knowledge of drawing would, I think, be about two years and a-half, or three years, allowing an hour each day for practise.

I am, Sir, your obedient servant,

Nicholas A. Brophy,

Drawing Master.

J. Patten, Esq., M.D.

NOTE A.

TABULATED particulars of the EXAMINATION of the PUPIL-TEACHERS attached to the NEWRY DISTRICT MODEL SCHOOL.
(Examined 30th November, 1852.)

Pupil-Teachers.	Age.	Religious Denomination.	Months in Training.	Method of Teaching.	English Language.					Geography.			Natural Philosophy.	Natural History.	Lesson Books.	Lessons on Money Matters.	Lessons on Reasoning.	Arithmetic.	Algebra.	Mensuration.	Geometry.	Book-keeping.	Writing.	Writing from Dictation.	Composition.
					Reading.	Grammar.	Parsing.	Derivations.	Spelling-Bk. Superseded.	Descriptive (Maps).	Generalized.	History.													
Thomas Collins,	18	R.C.,	12	B	B^2	B	B	B	B	A^2	B	C	B	C	B	B^1	B^3	B^1	B	B	B	B	B^1	B^1	B^1
John Begley, .	18	Presb.	9	B	B^2	B	B^1	C^1	B^3	B^1	B^1	C	B	B	B	B^2	C^1	B	B^2	B	B^3	B	C^2	B^2	B^2
Chrstph. Briens,	19	E.C.,	5	C	B^3	C	C	C	C	C	C	D	D	D	C	C	D	C	C^2	C^2	C^2	C^2	C	C	C
Samuel Sloane,	18	Presb.	5	C	C	C	C^2	C^3	C^3	C	C	D	C^3	C^3	C	C^3	D	B	C^3	C^3	C^3	C^3	C^1	C^1	C^2
James Kerr, .	17	R.C.,	5	B	B	B	B	C^1	B	B	B	D	C^3	C^3	C^1	C^1	C	B^1	C^1	B	B^2	C^1	B^1	B^1	B
James Massey,	19	E.C.,	5	C	B	C^2	C	C^3	C	C	C	D	C^3	C^2	C	C^3	D	C^1	C^3	C^3	C^2	C^3	C^1	C^2	C^2
Berd. Murray,	16	R.C.,	5	C	B	B^2	B^2	C^2	C	B	B	D	C	C	C^1	C^2	D	C	C^3	C^3	C^2	C^3	C^3	C^2	C
Thomas Reilly,	17	R.C.,	5	C	B	B^2	B^1	C^2	C	B^2	B	C^3	D	C	C	C^3	D	C^3	C^3	C^3	C^3	C^3	D^1	C^1	C

The letters A, B, C, D, E, wherever inserted, signify, respectively, "Very Good," "Good," "Middling," "Bad," and "Very Bad." The indices 1, 2, 3, mark shades of differences.

NOTE B.

TABULATED PARTICULARS of the Examination of Paid Monitresses attached to the Newry District Model Schools.
(Examined 19th November, 1852.)

Paid Monitresses.	Age.	Religious Denomination.	Months in Training.	English Language.					Geography.		History.	Natural History.	Lesson Books.	Money Matters.	Arithmetic.		Writing.	Writing from Dictation.	Composition.	Needle-work.	Method of Teaching.	Method of Examining.
				Reading.	Grammar.	Parsing.	Derivations.	Spell-B. Superseded.	Descriptive (Maps).	Generalized.					Practical.	Theoretical.						
Susan Henderson, . .	15	E. C., .	–	B	B	B	C	B	C	C	C	C	C	–	C	C	B	B	B	B	B	B
Margaretta Marshall, .	16	Presb., .	–	B	B	A	B	B	B	B	C	C	B	–	B	C	B	B	B	B	B	B
Mary Jane M'Nulty, .	15	R. C., .	–	B	C	C	D	C	C	C	D	D	C	–	C	D	C	C	C	C	C	C
Matilda Brady, . .	15	Presb., .	–	B	B	B	C	B	B	B	D	C	C	–	B	B	B	B	B	B	B	B

The Letters A, B, C, D, E, wherever inserted, signify, respectively, "Very Good," "Good," "Middling," "Bad," "Very Bad."

Note C.

List of the Pupil-Teachers who have entered Newry District Model School from opening till 31st December, 1852.

No.	Names.		Religious Denomination.	Where Educated.	Time Appointed.	Time of Leaving.	Destination.
1	William Sugars,	16	Episcopalian,	Hillsborough N. School,	15th May, 1849,	31st May, 1850,	Appointed to Bushmills National School.
2	Peter Rooney,	16	Roman Catholic,	Banbridge N. School,	,, ,, ,,	27th April, 1850,	Died of Consumption.
3	James M'Gaw,	19	Presbyterian.	Ballykeel N. School,	,, ,, ,,	25th May, 1850,	Appointed to Windsor Hill Union N. School, Newry.
4	Michael Rooney,	19	Roman Catholic,	Mayo N. School,	,, ,, ,,	2nd April, 1850,	,, Mulligan's National School.
5	Owen Cunningham,	16	Roman Catholic,	Monaghan N. School,	1st Dec., 1849,	23rd Dec., 1850,	,, Loughbrickland N. School; died since.
6	William Nesbitt,	19	Episcopalian,	Beech Hill N. School,	,, ,, ,,	,, ,, ,,	,, Ballybrick National School.
7	Thomas Mackin,	17	Roman Catholic,	Dorsey N. School,	,, ,, ,,	,, ,, ,,	,, Loughbrickland National School.
8	James M'Dowell,	19	Presbyterian,	Carrickfergus N. School,	,, ,, ,,	31st October, 1850,	,, Hillsborough National School.
9	John Donnelly,	18	Roman Catholic,	Monaghan N. School,	3rd June, 1850,	28th June, 1851,	,, Drogheda Mill National School.
10	James Seed,	17	Episcopalian,	Ballydock N. School,	,, ,, ,,	12th June, 1851,	Shopkeeping.
11	Daniel Clarke,	18	Presbyterian,	Vallenbrook N. School,	,, ,, ,,	27th June, 1851,	Appointed to Antrim Workhouse National School.
12	Owen M'Kenna,	17	Roman Catholic,	Monaghan N. School,	,, ,, ,,	28th June, 1851,	,, Aughnaglough National School.
13	David Geddis,	17	Presbyterian,	Fourtowns N. School,	13th July, 1850,	,, ,, ,,	,, Fourtowns National School.
14	William M'Millian,	16	Episcopalian,	Newry D. Model School,	11th Jan., 1851,	31st Dec., 1851,	,, Assistant in Bessbrook N. School.
15	William Lennon,	18	Roman Catholic,	Killooney N. School,	,, ,, ,,	,, ,, ,,	,, A National School near Dungannon.
16	Bernard M'Conville,	17	Roman Catholic,	Monaghan N. School,	,, ,, ,,	2nd Feb., 1851,	Not known.
17	William Kelly,	18	Unitarian,	Ardmillian, N. School,	14th Jan., 1851,	31st Dec., 1851,	Appointed to Ardmillian National School.
18	Hugh M'Gladrigan,	17	Roman Catholic,	Kerrib N. School,	1st August, 1851,	13th May, 1852,	,, Assistant in Gilford National School.
19	John Brady,	16	Roman Catholic,	Carnagilta, N. School,	,, ,, ,,	30th June, 1852,	Learning Classics.
20	John M'Nally,	18	Roman Catholic,	Aughnasida N. School,	11th August, 1851,	17th May, 1852,	Not known.
21	Hugh Ward,	19	Presbyterian,	Shinn N. School,	13th August, 1851,	30th June, 1852,	Appointed to Ardaghy National School.
22	Isaac Weir,	16	Presbyterian,	Newry D. Model School,	7th Jan., 1852,	15th Jan., 1852,	At School.
23	Thomas Collins,	17	Roman Catholic,	Folea N. School,	15th Jan., 1852,	—	Still in training here.
24	John Begley,	18	Presbyterian,	B. C. Maddy, N.S.,	8th March, 1852,	—	Do.
25	Thomas Reilly,	16	Roman Catholic,	Newry D. Model School,	1st July, 1852,	—	Do.
26	Bernard Murray,	16	Roman Catholic,	Downpatrick N. School,	,, ,, ,,	—	Do.
27	Samuel Sloane,	17	Presbyterian,	Shinn N. School,	,, ,, ,,	—	Do.
28	James Kerr,	17	Roman Catholic,	Kilcurry N. School,	2nd July, 1852,	—	Do.
29	James Massey,	19	Episcopalian,	Poyntzpass, N. School,	5th July, 1852,	—	Do.
30	Christopher Briens,	19	Episcopalian,	Folea N. School,	8th July, 1852,	—	Do.

NOTE D.

NEWRY MODEL SCHOOL, December, 31, 1852.

Amount of School-books and Requisites sold during 1852.

	Boys.			Girls.			Infants.			Total.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
January, .	1	13	7½	0	8	5½	0	0	7	2	2	8
February, .	1	9	5½	0	8	7	0	0	4½	1	18	5
March, . .	1	1	4½	0	4	10½	0	0	11½	1	7	2½
April, . .	0	11	4½	0	8	8	0	0	8	1	0	8½
May, . .	0	19	7	0	10	2½	0	0	6½	1	10	4
June, . .	0	15	9½	0	9	10½	0	0	6	1	6	2
July, . .	0	19	1	0	9	3½	0	0	3	1	8	7½
August, . .	1	0	0	0	12	11½	0	1	8½	1	14	8
September, .	1	6	2½	0	9	1½	0	0	7	1	15	11
October, .	1	5	2	0	7	2½	0	1	2½	1	13	7
November, .	0	19	3½	0	7	11	0	0	7	1	7	9½
December, .	0	15	3	0	3	1½	0	0	1	0	18	5½
Total for year,	12	16	2½	5	0	3½	0	8	0½	18	4	6½

Total amount of Books and Requisites sold in 12 months ending 31st of December, 1852, ... £18 4*s.* 6½*d.*

PROGRAMME OF EXAMINATION.—MALE DEPARTMENT.

First Class.—Reading, Spelling, and Meaning of Words. Notation, Numeration, and Addition (Mentally and on Slates). Map of the World.

Second Class.—Reading, Spelling (Orally, and on Slates), and meaning of Lessons. Recitation of verse from Second Book and Sacred Poetry. Parts of Speech. Maps of the World and Europe. First four rules of Arithmetic (Mentally and on Slates). Writing on paper.

Sequel Class.—Reading, Spelling (Orally and by Dictation). Meaning of Lessons: Prefixes, &c., Affixes of Words occurring in the Lessons. Recitation of poetical pieces in Second and Sequel Books, and Sacred Poetry. Maps of the World, Europe, and Ireland. Arithmetic: Simple and Compound Rules (Mentally and on Slates). Writing on paper. Parsing Etymologically.

Third Class.—Reading: Natural and Scripture History. Spelling (Orally and from Dictation). Meaning of Lessons. Recitation of poetry in the preceding books. Parsing Etymologically. Prefixes, Affixes, and Roots of words occurring in the Lessons. Maps of World, Europe, Asia, and Ireland. Arithmetic: Compound Rules, and Reduction (Mentally and on Slates). Verbal distinctions.

Fourth Class.—Reading and Explanation of the three Natural Kingdoms, Descriptive Geography, Scripture History, and Lessons on Money Matters. Verbal distinctions and rules for Spelling. Geography: Maps of Europe, Asia, Africa, and Australia. Grammar: Parsing prose Syntactically. Outline

of Ancient and English History. Derivation of words occurring in the Lessons. Arithmetic: Theoretical, Practical, and Mental, to the end of Proportion. Composition: by short essays and letters. Recitation of numerous pieces occurring in the Lesson Books. Euclid: First Book. Writing: Copy-lines and from Dictation.

Fifth Class.—Reading Lessons: Physical Geography, Geology, Ancient and Modern History, Animal Physiology, and Mechanical Philosophy. Grammar: (Sullivan's); parsing and analyzing passages in prose and poetry. Derivation of words occurring in the Lessons. Geography: Mathematical and Political, with the Maps of the different countries of the World; Historical Sketch of Great Britain and Ireland. Arithmetic: Theoretical, Practical, and Mental, comprehending the various rules in Thompson. Algebra: Simple Rules and Equations. Geometry: first three books. Mensuration of plane surfaces. Book-keeping: two sets. Easy Lessons on Reasoning: eight chapters. Political Economy: as given in the Easy Lessons on Money Matters. Composition: Writing essays and letters.

Singing.—"Love between Brothers and Sisters," "Against Lying," "My Mother," "Against Idleness," "Graves of a Household," "The Lark," "Hail Smiling Morn," "Spinning Wheel," "Sweet Home," "Rule Britannia," "National Anthem," &c. &c.

W. BRADY.

PROGRAMME OF EXAMINATION.—FEMALE DEPARTMENT.

Second Class.—Reading, Spelling, and Explanation. Grammar: Parts of Speech. Geography: Maps of the World, Europe, and Ireland. Arithmetic: Notation and Numeration; first four rules. Writing on slates.

Sequel Class.—Reading, Spelling, and Explanation. Grammar: Parts of Speech. Geography: Maps of Europe, Asia, and Ireland. Arithmetic: Simple and Compound Rules. Mental Arithmetic. Writing on paper and from dictation.

Third Class.—Reading and Explanation: Spelling-Book, 1st and 2nd Parts, and Rules for Spelling. Etymology: Prefixes, and Affixes. Grammar: to parse a sentence Etymologically. Geography: England, Scotland, Asia, and Africa. Arithmetic: Compound Rules and Reduction. Mental Arithmetic. Writing from dictation.

Fourth Class.—Reading in Lesson Books, and occasionally Selections from the Book of Poetry. The principal parts of Spelling Book; Latin, Greek, and Saxon Prefixes, and Derivations. Grammar: to parse a sentence Syntactically. Geography: Elementary ideas of Geography Generalized; Maps of America and Australia; Historical Sketch of the British Islands. Arithmetic: Simple Proportion. Mental Arithmetic.

Fifth Class.—Reading: Biographical Sketches of British Poets, and Literary Class Book. Spelling Book: Prefixes, Affixes, and Derivations. Grammar: to parse a poetical pas-

sage. Geography: First seven chapters of Geography Generalized; Sacred and Ancient Geography. Maps of the United States, Australia, and Ancient World; Sketches of the History of Greece, England, and Ireland. Arithmetic: Bills of Parcels, Compound Proportion, and Practice. Mental Arithmetic. Composition: to write a short essay on a given subject, with correct spelling and grammatical accuracy.

Newry.

SARAH GUMERSON, Teacher.

INFANT DEPARTMENT.

First Class.—Reading, Spelling, and meaning of words. Number, by means of the ball frame. Object Lessons. Map of the World. Sacred Poetry. Singing.

Second Class.—Reading, Spelling, and meaning of Lessons. Arithmetical Tables: Addition, Subtraction, mentally and on slates. Natural History. Maps of the World, Europe, and Ireland. Sacred Poetry. Singing. Writing on slates.

ANNABELLA FITZGERALD.

No. 6.—SECOND ANNUAL REPORT of the COLERAINE DISTRICT MODEL NATIONAL SCHOOL, by WILLIAM M'CREEDY, Esq., Head Inspector, and A. T. OSBORNE, Esq., District Inspector.

Coleraine.

The CHILDREN on the ROLL are classed as follows:—

	Boys.	Girls.	Infants.
First Book,	–	–	33
Second Book,	7	14	10
Sequel,	11	–	17
Third Book,	18	27	2
Fourth Book,	18	17	–
Fifth Book,	28	5	–
Book of Poetry,	–	–	–
Elements of Grammar,	18	41	62
Parsing and Syntax,	46	22	–
Descriptive Geography,	47	41	62
Mathematical Geography,	28	22	–
Arithmetical Tables,	82	63	61
First Four Rules,	36	37	61
Compound Rules and Reduction,	20	9	–
Proportion and above,	28	17	–
Mental Arithmetic,	75	63	–
Geometry,	9	–	–
Algebra,	9	–	–
Mensuration,	9	–	–
Book-keeping,	9	–	–
Lessons on Reasoning,	9	–	–
Scripture Lessons,	48	63	6
Truth of Christianity,	28	–	–
Sacred Poetry,	–	–	61
Writing on Slates,	7	–	51
,, on Paper,	75	63	10
,, from Dictation,	65	49	–
Singing,	82	63	61

BRANCHES FOR FEMALES.

Sewing,	–	40	3
Knitting,	–	10	–
Straw Platting,	–	–	–
Fancy Work,	–	13	–

APPENDIX H.

I. Reports on District Model Schools.

Coleraine.

April, 1853.

GENTLEMEN,—We submit this Report of the Second Annual Examination of the Coleraine District Model National School with very great pleasure—the increase in attendance, the increase in efficiency, and the growing favour with the public of this really excellent institution, being such as to warrant our most sanguine hopes of its ultimate and permanent success.

The open Examinations, attended by the public, were held by us, assisted by the different Teachers, on the 9th and 10th of September, and the private Examinations, during which every pupil, and every branch of study were thoroughly sifted, were held on the 2nd, 3rd, 6th, 7th and 8th of September.

We thought it right, remembering the interest felt in the answering of the children last year by the parents and the general public, to give two days this year to the Public Examinations; and no better practical evidence can be given of the growth of the institution in the number of pupils, and the extent of their attainments, than the fact, that while last year we were able to complete the Private Examination in three days, this year we were scarcely able to overtake it in five days.

Unfortunately for our arrangements the first day of the Public Examination was that selected by the British Association, then sitting in Belfast, to visit the Giant's Causeway, which drew away to that locality many of the respectable and influential people of the town and neighbourhood, in addition to the Commissioners of Coleraine, who waited upon that distinguished body as an official compliment. Notwithstanding this circumstance, however, on both days of the examination, the number of visitors (including some individuals of the highest rank) was so great, that we could not afford them sufficient accommodation; and the interest which they manifested in the entire proceedings, was such as to afford us very sincere gratification.

Our judgment of the institution, in an educational point of view, as expressed in this Report, is founded chiefly upon the results of the Private Examinations, as there are many circumstances attendant upon a Public Examination which unavoidably interfere with the formation of a calm and judicious opinion.

Male Department.—In this department there is an improvement in order since our last Report, in the demeanour of the pupils, and in conformity to the prescribed routine.

Our examination extended over the course of study detailed in the programme, drawn up by the Head Master (Note A).

Reading.—The boys have made very fair improvement in reading since the last examination. More than twenty per cent. of the attendance added to fluency and accuracy, some degree of taste and expression, and of the remainder nearly all read with that amount of correct pronunciation, slowness, punctuation, judicious separation of words, and clear articulation which lie at the foundation of all after-acquisition of the true graces of elocution.

Spelling and Writing from Dictation.—In these important exercises, the more advanced boys acquitted themselves fairly, but there was a great falling away in the junior classes. As excellence in spelling has justly been considered as a test of careful teaching, we have brought this defect so strongly before the attention of the Master, that we expect to find at our next examination a more uniform and general proficiency.

Grammar.—Grammar is taught textually to the Third, Fourth, and Fifth Classes. The knowledge of the subject is as extended among the junior pupils, and as critical and accurate among the senior, as is usual in the best class of Elementary English Schools. Some of the more advanced pupils parse Syntactically with a very fair amount of fluency and accuracy.

Geography and Maps.—In the tracing of blank or outline maps, the children exhibited such promptness and accuracy, as indicated very careful teaching, and the general answering in mathematical, physical, and political geography was not less creditable.

Penmanship.—Taking the School as a whole, there is a well-marked improvement in the keeping of the copy-books, the supervision of the Teacher, and the care and attention of the pupils, but we cannot say that even in the highest classes, and in the best specimens exhibited to us, there was present that amount of freedom, neatness, and elegance, which in an accomplishment so useful and necessary we know to be desirable, and believe to be attainable. We have furnished the School with new and more graceful copy-lines, and we look forward to the hope of being able to speak more favourably at our next examination of the penmanship of the boys.

Arithmetic.—We have examined the children at considerable length in this most important branch of boys' elementary education, and we have much pleasure in reporting that the expertness and accuracy of the slate exercises, and the theoretical knowledge of rules and principles were highly satisfactory. It is evident from the results of our examination that no attempt is made to force on boys to rules for which they are not prepared, and that with every step of their progress they are thoroughly familiarized. The readiness of the pupils in Mental Arithmetic was not equal to the facility of their answering in theory and on the slate.

Extra Branches.—These branches are at present taught only to a few of the more advanced boys of the Fifth Class. In Reasoning, Natural Philosophy, Political Economy, Book-keeping and Algebra, the pupils acquitted themselves fairly. In Geometry, though confined to the First Book of Euclid, the answering, except in one or two instances, was not satisfactory.

To conclude with this department, we beg to subjoin a short summary of the results of our examination in the following table, where will be seen at a glance, the general proficiency of the pupils in the several branches of their course of study:—

Table of Proficiency.—Of the 65 boys examined in the male department, there were—

Able to read the Second Book, or Sequel, correctly	27
,, ,, the Third and higher Books with ease and intelligence,	23
,, to answer satisfactorily in explanation of their Lesson Books,	22
,, to parse Syntactically,	18
,, ,, Etymologically,	17
,, to write sentences from dictation, with readiness and correctness,	15
,, to trace blank Maps *well*, and answer generally on Descriptive Geography,	27
,, to answer satisfactorily on Mathematical and Physical Geography,	9
,, to answer on the derivation and analysis of words,	12
,, to write a good hand with ease and freedom,	12
,, to write fairly,	21
,, to solve questions in Proportion, and above, readily and correctly,	13
,, to answer in Notation and Numeration, and work Sums in the Simple Rules, satisfactorily,	14
,, to answer with promptitude on Mental Arithmetic,	11
,, to answer satisfactorily on the Lessons on Money Matters,	7
,, to answer fairly on the Lessons on Reasoning,	4
,, to acquit themselves satisfactorily in Geometry, Mensuration, and Algebra,	4

Female School.—In this School the admirable tone which we had occasion to commend in our last Report has not diminished. There are among the pupils the same kindly consideration for each other, the same cheerful alacrity in answering, and the same reliance on self-effort, and self-application as formerly, whilst the radical defect so strongly animadverted on in our former Report has been happily corrected; elementary rules and lessons have been carefully taught, and the work of education has been systematically and progressively conducted from first principles.

Course of Study.—This is fully detailed in the programme drawn up by the Teacher (Note B).

Reading.—Very many of the girls read with a considerable amount of taste and expression, whilst nearly all possess a pleasing enunciation, and read with ease and fluency.

Spelling and Dictation.—The girls acquitted themselves fairly in *viva voce* spelling and writing from dictation. The answering of the Fourth and Fifth Classes in the Spelling-book Superseded, was highly creditable both to the pupils and Teacher.

Arithmetic.—Much attention has been given by the Teacher since the last examination to the grounding of the pupils in Elementary Rules, and the explanation of theoretical principles. The slate exercises, in the great majority of cases, were performed with neatness, accuracy, and despatch, and the answering in the theory and explanation of the different rules was not less satisfactory. In Mental Arithmetic the readiness and accuracy surpassed that of the boys.

Penmanship.—All the copy-books are kept with neatness,

cleanliness, and taste. In general the penmanship is fair, and in very many of the specimens exhibited to us, both the style and execution were extremely good.

Needlework.—On the days of the Public Examination the Female School-room, tastefully decorated with flowers and evergreens, was hung round with numerous specimens of plain and ornamental needlework, executed by the pupils. These were carefully and fully inspected by the female visitors, and called forth many expressions of commendation. Much care and attention have been bestowed upon this most useful female accomplishment both by Miss Smith and Miss Hanson, and the proficiency of the pupils have abundantly rewarded them. We regret that the projected design of the Commissioners of supplying sewing materials to their Model Schools has not yet come into operation, as with such a valuable auxiliary, this most important branch of instruction could be more generally and efficiently taught.

Other Branches.—Grammar is taught textually to the Third, Fourth, and Fifth Classes. The amount of knowledge attained by the pupils is considerable, and the Syntactical parsing of the Fourth and Fifth Classes is very creditable. In Mathematical, Physical, and Political Geography, the answering of the Fifth Class was very satisfactory. In Descriptive Geography the pupils generally acquitted themselves fairly, and the tracing of skeleton maps was in all cases expert and accurate. In knowledge of the Lesson Books, the answering of the Fifth Class only was such as we could commend; in all the lower classes the acquaintance with the subject of the lessons daily read in the School was remarkably deficient. We have thought it right to call the special attention of the Teacher to the immediate remedy of so grave a defect. In the following table, which we have drawn up with the most scrupulous care, is set forth a summary estimate of the general proficiency of the pupils in all branches whereon they were examined.

Table of Proficiency.—Of the 56 Girls examined in the Female Department, there were :—

Able to read the Second Book, or Sequel, correctly, . .	21
,, ,, the Third and higher Books with ease and intelligence, ...	27
,, to answer satisfactorily in explanation of the Lesson Books, ...	15
,, to parse Syntactically, ...	12
,, ,, Etymologically, ...	17
,, to write sentences from dictation, with readiness and correctness, ...	18
,, to trace blank Maps *well*, and answer generally on Descriptive Geography, ...	29
,, to answer satisfactorily on Mathematical and Physical Geography, ...	8
,, to answer on the derivation and analysis of words,	14
,, to write a good hand with ease and freedom, . .	22
,, to write fairly, ...	21
,, to solve questions readily and correctly in Compound Rules and Proportion, ...	17
,, to answer in Notation and Numeration, and work Sums in the Simple Rules, satisfactorily, . .	10
,, to answer with promptitude on Mental Arithmetic,	11

APPENDIX H.

I. Reports on District Model Schools.

Coleraine.

Infant School.—Of this School we can speak only in the language of commendation. In knowledge of the Lesson Books, and especially in Natural History, the answering of the Second, Sequel, and Third Classes was such as to give very satisfactory evidence of careful and intelligent teaching. The examination in the gallery extended over the maps of the World, Europe, and Ireland, in addition to the subjects specified in the programme, (Note C.,) drawn up by Miss Hellings. The simultaneous answering, though almost general, was remarkable for intelligence, and the entire absence of any thing like mere parrotting.

The animated countenances of the children, their cheerful obedience, betraying no symptom of constraint, the order and regularity with which they perform all their evolutions, the taste and accuracy with which they execute their little songs and hymns, and the many other evidences presented to us of mental development and moral training, enable us to concede to this School strong claims to the title of a Model Infant School.

Vocal Music.—We must not omit to make special mention of the classes in Vocal Music, organized by Mr. Lyons, and which added a new and interesting feature to the present examinations. These classes, though now under teaching little more than four months, exhibited an acquaintance with the principles of music as a science remarkably correct and extended. Several melodies were sung by the pupils with great sweetness and power, and a number of concerted pieces were executed with such an amount of taste, accuracy, and precision, as to reflect much credit upon the diligence and judgment of their Teacher, and to furnish new proof, if any were wanting, of the value and excellence of the Hullah system (Note D).

Pupil-Teachers.—There are at present in the institution only five Pupil-Teachers, the others having been appointed to the charge of schools at the close of the period of training, and the vacancies having not yet been filled up. The conduct of these young men during the past year to each other, their Teacher, and their pupils, has been most exemplary; and their answering in the course of study prescribed by the Commissioners has been such as to afford us very sincere gratification.

Monitresses.—We also examined, at considerable length, the Monitresses who act as assistants in the Female and Infant Departments, and we have to report most favourably of their conduct and attainments.

During the past year five of the Pupil-Teachers and two of the Monitresses have been appointed to schools, and we are much gratified in being able to state, that their conduct so far, in their respective positions, has been such as to give full satisfaction to the parents and managers.

Altogether the prospects of the Coleraine District National Model School are full of encouragement, and we are enabled to report most favourably of its efficiency and success.

Before concluding, we feel it our pleasing duty to record, that Alexander Barklie, Esq., of Mullamore, County of Londonderry, a gentleman devoted to the cause of education, as to every other good cause, and who, from the beginning, has taken the deepest interest in our Model School, has presented the boys' department with a large and beautiful Terrestrial Globe, which has been suitably suspended in the School-room, where it is in constant use for the instruction of all the more advanced pupils.

We have the honour to remain, Gentlemen, your obedient servants,

WILLIAM M°CREEDY, Head Inspector.
A. T. OSBORNE, District Inspector.

In order to show the local estimation in which the Coleraine District Model School is held, we subjoin the following extract from the *Coleraine Chronicle* of the 18th September, 1852:—

"COLERAINE DISTRICT NATIONAL MODEL SCHOOL.

"The second Annual Public Examination of this valuable and prospering institution was held on Thursday and Friday last, the 9th and 10th instant, in the Infant School-room, and was attended by a large number of visitors, who were highly interested and delighted with the entire proceedings. The examinations were conducted by William M°Creedy, Esq., Head Inspector of National Schools, and A. T. Osborne, Esq., the Inspector of the District, assisted by the several Teachers. The Inspectors had previously devoted five entire days to the private examination of all the pupils in their several branches of study, making a minute record of every answer, and of every mistake.

"The open examination was intended for the satisfaction of the public, and certainly nothing could be better calculated to commend the institution, to gratify the parents, to encourage the Teachers, and to please and delight the general public. The examinations extended over a wide range, comprehending Grammar, (textual and parsing,) Geography, (mathematical, physical, and political,) blank Maps, Reading, Spelling, Writing from Dictation, Arithmetic, (slate, and mental,) Natural Philosophy, Political Economy, Mensuration, &c., &c. Although the general answering was altogether extremely good, we were particularly struck with the reading, the writing from dictation, the remarkable accuracy of the spelling, the readiness and correctness of the arithmetical exercises, and the knowledge of blank maps. In the last-named exercise especially, the readiness and precision of mere infants were really surprising.

"Very fine pieces of penmanship were exhibited, and a large number of specimens of every kind of plain and ornamental needlework executed by the girls in attendance, were suspended on the walls, or displayed upon the tables and benches of the Female School-room.

"But we must take occasion to make particular mention of the Vocal Music, the exercises of which came in as a delightful and agreeable episode between the literary examinations of the different classes. Although the classes in music, on the Hullah system, have been scarcely four months under the instructions of the Teacher, (Mr. Lyons,) their knowledge of the subject as a science, evinced by their answering, was not only correct, but extended; and the precision, taste, and power with which some exquisite solos, duets, trios, rounds, and glees were performed, was the admiration and delight of every one present.

"The rooms were very tastefully decorated with festoons of flowers and evergreens by the Teachers and assistants, and presented a very pretty and pleasing appearance. Among the many visitors who witnessed the examination, we observed the following: Lady Emily Richardson; Mrs. Cromie, Colebrene; Mrs. Richardson; Miss Richardson; Appsley Pellatt, Esq., M.P.; Alexander Barklie, Esq., Mullamore; Miss Barklie; Miss Griffiths; Robert Sharpe, Esq., and family; Rev. Henry Murphy, Dunluce, and Mrs. Murphy; Rev. William Richie; Rev. J. A. Canning; Doctor MacAldin; Mrs. MacAldin; Miss MacAldin; Doctor Cavin; Mrs. Carson; Miss Carson; Mrs. Davenport; Hugh Bellas, Esq.; Joseph M'Carter, Esq., and family; Alexander Cuthbert, Esq., and family; &c., &c.

"So admirable were all the arrangements, that notwithstanding the crowded state of the room, and although 200 pupils were passed under examination, in successive classes, not the slightest confusion or disorder was visible in the proceedings.

"At the close of the examinations on Friday, the Rev. J. A. Canning, in an exceedingly neat and highly complimentary speech, moved the following resolution, which was seconded by Alexander Barklie, Esq., of Mullamore—'That we cannot separate without expressing the high sense which we entertain of the ability, taste, and diligence displayed by Mr. M'Creedy and Mr. Osborne in the state of order and efficiency to which they have in so short a time brought our Model School; and that we feel assured that these gentlemen will regard the very superior education which is being imparted in the School as a most valuable part of their reward for their constant and eminently successful labours.'

"It was then moved by Mr. Canning; seconded by Joseph M'Carter, Esq.,—'That the examination which has now been brought to a close, has given most ample proof of the diligence, talent, and high success of the Teachers in all the departments of the Coleraine Model School; that the answering of the pupils has evidenced the soundness, the extent, and the value of the education which they are receiving; and that we are more deeply impressed than ever with a feeling of thankfulness that such a valuable boon has been conferred upon our country as that which she is enjoying in the education imparted to the young by the National System of Education.'

"On Saturday, certificates, neatly printed on parchment, together with premiums in money, were distributed by the Inspectors to all the children in the different departments who had distinguished themselves during the searching official examination to which they had been subjected."

NOTE A.

PROGRAMME OF PUBLIC EXAMINATION.—MALE DEPARTMENT.

Fifth Class.—First Division—Fifth Book: Animal Physiology, first five lessons; and Natural Philosophy to the end of the Mechanical Powers, with spelling of words, meaning, derivation, and questions of explanation on the same. Grammar: to the end of Syntax; Syntactical Parsing. Spelling-book: all. Mathematical Geography: all Blank Maps. Arithmetic: Proportion, Simple and Compound; Fractions, Decimals, and Practice; Mensuration of Superficies. Geometry: First Book of Euclid. Algebra: to Quadratic Equations. Mental Arithmetic. Lessons on Money Matters; Lessons on Reasoning, First Part. Writing from Dictation.

Fifth Class.—Second Division—Fifth Book: Physical Geography, ten lessons, with spelling of words, meaning, derivation of words, and questions of explanation on the same. Grammar: Parsing. Spelling-book. Geography. Arithmetic: Slate and Mental. Lessons on Money Matters; and Writing from Dictation, same as First Division.

Fourth Class.—Fourth Book: Descriptive Geography, first six lessons, with spelling of words, meaning, derivation, and questions of explanation on the same. Parsing; Grammar: to the end of Etymology. Spelling-book: Three First Parts. Arithmetic: to the end of the Compound Rules. Geography: Europe, Asia, and America. Blank Maps: Europe, Asia, and the British Isles. Mental Arithmetic: First Eight Rules. Lessons on Money Matters. Writing from Dictation. Derivations: Prefixes and Affixes.

Third Class.—Third Book: Scripture History to the end of the History of Joseph, with spelling of words, meaning, and questions of explanation on the same. Grammar: to the Verb. Spelling-book: First Part. Geography: Geographical Definitions; Blank Maps of Europe, Asia, and Ireland. Arithmetic: the Simple Rules. Mental Arithmetic: First Five Rules. Writing from Dictation.

Second Class.—Sequel—Sequel No. 1: "History of a Cotton Frock," Parts 1 and 2. "History of a Penny," Parts 1 and 2, with spelling of words, meaning, and questions of explanation on the same. Geography: Blank Maps of Europe and Ireland. Arithmetic: Simple Addition; Mental Arithmetic.

Second Class.—Second Book: Lessons XV., XVI., XVIII.,

Coleraine.

XIX., XX., and XXI, with spelling, meaning, and explanation. Geography: Blank Maps of Europe and Ireland. Arithmetic: Addition; Tables.

JOHN JOHNSTON, Resident Teacher.

NOTE B.

FEMALE DEPARTMENT.

Fifth Class.—Reading: History and Chronology in "Girls' Reading-book." Geography: "Geography Generalized," First Part; Maps of the World, Europe, Asia, and Ireland, Arithmetic: Proportion, Fractions, and Mental Arithmetic, First Fourteen Rules. Spelling: the whole of "Spelling-book Superseded." Dictation: to write from Dictation any sentence selected from Class-books; and write a story on any object presented to view—a pen-knife, a work-basket, &c.

Fourth Class.—Reading: First Section of Fourth Book. Grammar: Inflections, according to the Text-book, so far as Syntax; Syntax, First Ten Rules. Parsing: to parse any sentence in prose. Spelling: First Three Parts of "Spelling-book Superseded; words and meanings from page 72 to 75; Roots, Prefixes, and Affixes. Arithmetic: Reduction, Proportion, and Mental Arithmetic, First Ten Rules. Geography: "Geography Generalized," Part First. Maps: the World, Europe, and England. Dictation: same as Fifth Class.

Third Class.—First Division—Reading: any lesson chosen in Third Book. Grammar: the Text-book, so far as the Verb. Geography: first 50 pages of Small Geography. Maps: Europe and Ireland. Spelling: First Two Parts of "Spelling-book Superseded;" rules for spelling, Latin Roots, Prefixes, and Affixes; difficult words beginning page 72, and ending page 75. Arithmetic: Reduction of Money; Mental Arithmetic, First Three Rules. Dictation: to write from Dictation any simple sentence. Second Division—Same as First, except that this Division gets a less extensive course of study; and in Arithmetic it is only in the simple Rules.

Second Class.—Reading: Second Book. Grammar: Definitions in large type only. Spelling-book: first 7 pages. Geography: Definitions, first 7 pages. Maps: the World and Ireland. Arithmetic: Notation and Numeration. Tables: Multiplication and Addition.

ELIZA SMITH, Teacher.

NOTE C.

INFANT DEPARTMENT.

General Lessons. First Book: First or highest Division; reading and spelling the first twelve lessons of section third. Second Division—reading and spelling, from lesson

eight, section second, to the end. Third Division—reading and spelling the first six lessons of section second. Fourth, or lowest Division—the alphabet, and spelling words of two letters.

Second Book—First Division: reading the first six lessons of section third; spelling the words at the top of the lessons, giving the meanings in their own language. Second Division—reading and spelling the entire of the first section, and two or three lessons of the second.

Sequel Book: reading in the Sequel from page 131 to page 202; subject, Zoology; spelling throughout the reading; also, the First Part of the "Spelling-book Superseded." Grammar: the Parts of Speech, and in the Text-book as far as the Pronoun. Geography: the Maps of the World, Europe, and Ireland, and the Blank Maps of Europe and Ireland. Arithmetic: first half of the Multiplication Table; and any questions in Pence Table.

Third Book—Reading: the History of Joseph, page 86 to page 95; also, the lesson on the Manufacture of Salt, page 258, spelling throughout the reading; the First and Second Part of "Spelling-book Superseded." Grammar: the same as Sequel Class. Geography: the same as Sequel Class. Arithmetic: Multiplication and Pence Table.

Gallery Lessons—any of the following subjects: "The Baker," "Solar System," "Cow," "Sheep," "Elephant," "Crocodile," or any general question on Natural History. For Geography, the Maps before mentioned. Pieces for singing: "The Cow," "The Sheep," "The Elephant." Sacred Pieces: "Creation," "Sound the Loud Timbrel," "The Dove," "The Vesper." "Parts of Speech." "We row," "The Whale," "The Clock," "Time Table."

Mary Louisa Hellings, Teacher.

Note D.

I.—Return of Pupils' Attendance, &c.,

The Numbers of Pupils on Rolls for week ending 11th September, 1852—

	Boys.	Girls.	Infants.
At 5*s.* per Quarter,	11	17	–
At 2*s.* 6*d.* ,,	33	28	17
At 1*d.* per Week,	38	18	44
Total Number of Pupils admitted from 30th August, 1851, to 11th Sept., 1852, exclusive of re-admissions,	115	120	105
On Rolls for week ending as above,	82	63	61
And of these there were—			
Under 5 years of age,	–	–	15
5 years, but under 7	3	–	46
7 ,, 11	40	20	–
11 ,, 15	25	31	–
15 years, and above,	14	12	–
Average age,	11⅓ yrs.	12½	5½

APPENDIX H.

I. Reports on District Model Schools.

Coleraine.

Of the Numbers on Rolls for week ending 11th September, 1852, there were—

	Boys.	Girls.	Infants.
Presbyterians, ...	56	34	39
Roman Catholics, ...	12	16	12
Episcopalians, ...	14	13	10

Of the Number admitted from 30th August, 1851, to 11th September, 1852, there were—

	Boys.	Girls.	Infants.
Presbyterians, ...	77	72	59
Roman Catholics, ...	12	28	21
Episcopalians, ...	26	20	25
Daily average attendance from 30th August, 1851, to 11th Sept., 1852, .	43¼	47	44
Daily average of Number on Rolls, for same time, ...	65	64	54
Number on 30th August, 1851, . .	51	68	57
Highest Number on Rolls at any time since 30th August, 1851, . . .	82	72	69

II.—Sales of Requisites, and Receipts of School Fees.

Amount of Requisites sold from 30th August, 1851, to 11th September, 1852.

	Boys.			Girls.			Infants.		
	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
1851, September, .	0	2	10	0	9	4½	0	0	11
,, October, .	0	7	0	0	7	1½	0	1	10
,, November, .	0	9	10½	0	7	0	0	1	4
,, December, .	0	6	0½	0	7	5		—	
1852, January, .	0	9	2	0	12	11½	0	1	8½
,, February, .	0	11	9½	0	5	6½		—	
,, March, . .	0	12	2½	0	4	7	0	0	2
,, April, . .	0	4	0	0	5	1½	0	0	5½
,, May, . .	0	14	4	0	18	8	0	5	2
,, June, . .	0	14	11½	0	6	8	0	0	10½
,, July, . .	0	10	9	0	13	6	0	5	0
,, August, . .	0	10	6	0	5	0	0	1	11
,, September, .	0	2	4	0	7	6		—	
Total, . .	£5	15	9½	£5	10	5½	£0	19	4½

Amount of Fees received for same time,—

	Boys.			Girls.			Infants.		
	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
1851, September, .	0	4	10	1	14	9	0	13	9
,, October, . .	1	2	4	1	0	6	0	19	1
,, November, .	0	16	6	2	11	3	0	15	8
,, December, .	0	11	0	1	4	5	0	11	5
1852, January, .	0	16	9	2	4	2	1	3	7
,, February, .	1	12	2	2	18	10	1	1	8
,, March, . .	4	7	11	1	5	3	0	18	4
,, April, . .	0	12	11	2	13	7	0	9	8
,, May, . .	1	9	4	4	19	11	1	8	8
,, June, . .	2	1	5	0	19	7	1	7	6
,, July, . .	0	11	5	2	4	0	0	12	5
,, August, . .	1	0	10	2	5	0	1	12	3
,, September, .	0	14	9	0	12	6	0	10	0
Total, .	£16	2	2	£26	13	9	£12	4	0

III.—PUPIL-TEACHERS who have entered COLERAINE DISTRICT MODEL SCHOOL since 30th August, 1851.

Name.	Age.	Religion.	Former Employment, or that of Parent.	Where Educated.	Time of Training: Months.	Cause of Removal and Destination.
William Burns, . .	21	Presbyterian, . .	Farmer, . . .	Newtown Crommelin National School, .	13	Appointed to Cross-roads N. S.
George M'Murray, .	17	Episcopalian, . .	Do., . . .	Carradoan N. School,	12	Tirreroan National School.
Peter Herbison, . .	20	Presbyterian, . .	Do., . . .	Ballymena M. S., .	8	Carnlea National School.
Sampson M'Cotter, .	17	Roman Catholic, .	Pupil, . . .	Droghead N. School,	6	Killowen National School.
John Boyle, . . .	17	Do., . .	Pupil, . . .	Letterkenny N. S.,	6	—

IV.—MONITRESSES who have entered COLERAINE DISTRICT MODEL SCHOOL from 30th August, 1851.

Name.	Age.	Religion.	Former Employment, or that of Parent.	Where Educated.	Time of Training; Months.	Cause of Removal and Destination.
Maryanne M'Allister, .	15	Roman Catholic,	Monitress in Killowen N. S.,	Killowen N. School,	12	—
Martha Kennedy, . .	14	Presbyterian, .	Pupil, ...	Coleraine M. School,	8	—
Eliza Dugan, . .	15	Episcopalian, .	Do., ...	Do., . .	6	—
Sarah Hanan, . .	14	Roman Catholic,	Do., ...	Randalstown N. S.,	3	—
Sarah Jane Cowen, .	16	Presbyterian, .	Monitress in Mr. Gowdy's Seminary, . . .	Mr. Gowdy's Sem.,	4	—

Boys who entered as Pupils and afterwards became Pupil-Teachers or Teachers.

William John Sinclair, entered a Pupil, and is now Teacher of Tulland's National School.

Thomas Forsythe, entered a Pupil, and is now Teacher of Letterlone National School.

Charles M'Fettridge, entered a Pupil, and is now Teacher of a National School.

John Graham, entered a Pupil, and is now Teacher of Ballymagarry National School.

Females entered as Pupils, now become Teachers.

Eliza Dugau, entered a Pupil, and is now a Monitress in Coleraine Model School.

Maryanne Walker, entered a Pupil, and is now a Teacher in Tubbermore National School.

Note E.—Programme of Vocal Music, as performed by the Pupils at the Annual Examination, 1852.

First Day.

Chorus,	Long may life,	Mozart.
Glee,	Hail! Smiling Morn,	Spafforth.
Part Song,	Down in a Green,	Hullah.
Irish Melody,	I saw from the Beach,	Moore.
Glee,	Lightly tread,	Scotland.
Irish Melody,	'Tis the last Rose of Summer,	Moore.

Exposition of Hullah's adaptation of the Hand to Vocal Music.

Anthem,	God bless our Native Land.	

Second Day.

Part Song,	Come hither and let us behold,	Hullah.
Irish Melody,	There is not in this wide world,	Moore.
Glee,	The Labourer's sleep,	Scotland.
Madrigal,	The Joyous Harvest time,	Morley.
Irish Melody,	I saw from the Beach,	Moore.

Exposition of Hullah's adaptation of the Hand to Vocal Music.

Chorus,	Hurrah! for Ireland,	National.
Anthem,	Lord dismiss us,	German.

Bailieborough. No. 7.—Joint Report on the Bailieborough District Model School, for the year 1852, by James Patten, Esq., M.D., M.R.I.A., Head Inspector, and Eugene A. Conwell, Esq., District Inspector.

January, 1853.

Gentlemen,—Since the date of the last General Report upon the state and working of these schools, the grounds in front of the Literary School-rooms and the dwelling-house on the farm have been levelled and laid out for ornamental planting, the play-grounds completed, and facilities and means of healthful recreation provided for the children attending both Boys' and Girls' Schools.

Occupation of time, &c.—The organization of the Establishment, occupation of time, programmes of study, &c. &c., as

published in the Appendix to the Seventeenth Report of the Commissioners, for the year 1850, vol. i., page 210, &c., continue to be carried out without alteration ;—indeed, all the great advantages we anticipated from the care and anxiety bestowed upon their methodical arrangement, we are gratified to find, have been fully realized, which could not have been the case without the cordial co-operation of the excellent staff of Teachers, who, now, after two years' experience of their *practical* working, believe that no arrangements could be more perfect.

The Teachers and classes in the schools having become accustomed to the systematic occupation of the school time, as laid down in the Time Tables, we were of opinion that an important improvement might be introduced ;—and during the course of the past year furnished each Pupil-Teacher and Paid Monitress with a blank book, supplying, at the same time, a form, in which to draw up every Saturday, after the business of the week has been gone through, a programme of the amount of knowledge on every subject taught, expected to be acquired by the classes intrusted to each during the course of the ensuing week ;—and on each Saturday (before drawing out a new programme for the next week) to note in a column for the purpose, and under the supervision of the Head Master or Head Mistress, any portion, in any of the subjects, which, from necessity, had been omitted during the past week. Thus a faithful and minute record is kept of the amount of school-business actually gone through, which affords us an opportunity of examining how *any* class, at *any* period, may have been employed. But the real value of these programmes consists in the circumstance that, when the schools assemble on Monday morning, each individual there, from the most backward child to the Head Teacher, feels that he has a certain specific object to accomplish during the week, and thus is given to all a *fixed aim* in arranging the business, and carrying out the exercises of every day. Each person, whether pupil or Teacher, has an opportunity of measuring his own strength, and ascertaining how much he can or can not accomplish during the week. Indeed, the greatest fault we had to find was that the Pupil-Teachers and Paid Monitresses, from their inexperience, *attempted* too much. For so far, however, we have found the arrangement to work well ; and the Teachers are satisfied as to its *practical* utility. Our young Teachers, trained in such habits during their apprenticeship, must necessarily carry to the schools to which they may be appointed, fixed habits and principles in regulating the arrangement of school-time and subjects to be taught, which cannot fail to make successful schools.

Pupil-Teachers, Agricultural Pupils, Paid Monitresses, &c.— We subjoin lists of all the Pupil-Teachers, Agricultural Pupils, and Paid Monitresses who have entered this institution up to 31st December, 1852, giving, in every instance, the age, religious denomination, dates of admission and leaving, and

APPENDIX H.

I. Reports on District Model Schools.

Ballieborough.

destination on removal—(See Note A), from which it will be manifest that *one* great, if not, indeed, *the* great object contemplated by the Commissioners in the foundation of District Model Schools has been realized here, viz.—supplying to the Managers of ordinary National Schools, as vacancies may occur in them, young persons previously trained in the art of teaching, who from early years have shown an aptitude and taste for the business of teaching, and thus superseding the necessity, which frequently has occurred, of sanctioning the appointment of persons with little recommendation beyond a smattering of undigested information, and who take up the business of teaching as a mere *speculation*. Little as is sometimes thought of it, the mission of the Teacher is one of great interest, and perhaps second to none in responsibility and power. It is his to form and mould the age; and in proportion as he labours effectively in his important vocation, will a higher type of society be realized.

Thoroughly impressed with the responsibility of their office, the Head Master and Head Mistress have been sedulous in their attention to the young persons committed to their charge respectively for training—careful that they should not only possess knowledge, but the art of communicating it, and an art still rarer—that of obtaining and exercising influence over the *hearts* of their pupils, showing at all times a genial interest in them, and thus winning their confidence and affection.

It is a pleasant and a hopeful thing to find that the young persons hitherto recommended from this institution to the charge of schools have given great satisfaction to the Managers and parents of the children; and, as might be expected, have greatly increased the quantity and improved the quality of the education given in the schools to which they have been appointed, thus spreading the blessings of education on every side, and laying the seeds of a harvest that will, ere long, be reaped in the improved moral tone and industrial prosperity of the people.

Twice, during the course of the last year, we conjointly examined the Resident Pupil-Teachers, Agricultural Pupils, and Paid Monitresses, viz., in the months of May and December, the tabulated results of whose answering we here insert. Besides being examined half-yearly by us, the Pupil-Teachers and Agricultural Pupils are frequently examined by the Head Master and the results recorded. (See Note B.)

We also give a list of the pupils, from the opening of the Schools in May, 1850, till 31st December, 1852, who have become Teachers, Pupil-Teachers, Agricultural Pupils, or Paid Monitresses—and an account of the sums expended by the Pupils in each school during the year in the purchase of books, stationery, &c., as well as of the amount paid in *School-fees*. (See Notes C. and D. appended.)

Arrangements for Religious Instruction, &c.—The arrangements for religious instruction, as published in the Appendix

to the Seventeenth Report of the Commissioners, page 215, vol. i., for the year 1850, remain unaltered, and have given general satisfaction. The clergymen of the different religious communions in the town and neighbourhood of Bailieborough, whose names are there given, continue, without exception, to visit the schools, when their other duties permit, for the purpose of insuring successful instruction in this essential department of education; and, in their absence, the Teachers and their assistants, of the different religious denominations, superintend the religious instruction of the pupils of their own persuasion, agreeably to the instructions of their respective clergymen.

Examinations, &c.—In the month of May, preparatory to holding the Annual Public Examination, and distribution of premiums, we examined the several classes in each School on the subjects set forth in the programmes on which they were prepared—(See Note B.) To attain so high a standard of proficiency, considering the backward state of education in this neighbourhood a few years ago, and the short time the Schools have been in operation, must have cost the Teachers the continual exercise of those most important qualities in a Teacher—sincerity, self-denial, much patience, and steady perseverance.

To afford us an opportunity of ascertaining the individual merits of every child at the Schools, *every* pupil in *each* class was examined on *every* subject taught in the class, and the results of the answering on each subject noted at the time after the pupil's name.

These private examinations held by us extended over three days for the boys, and three days for the girls. From a careful scrutiny of the answering, after receiving a favourable account from the Teacher of each department as to conduct, diligence, &c., we adjudged the premiums; and have also been able to draw up the following tables, which will show a very respectable amount of proficiency in both Boys' and Girls' School :—

Proficiency of Pupils—Boys' Department.—Of the boys examined, there were—

	Number.	Number examined.
Able to read Second Book and Sequel with tolerable accuracy,	16	30
,, to read Second Book and Sequel with ease and correctness,	13	30
,, to read Third and Higher Books with ease and intelligence,	14	21
Acquainted with the Parts of Speech,	26	40
Able to parse and apply the Rules of Syntax,	18	21
,, to write a sentence from dictation with tolerable accuracy,	6	21
,, to write a sentence from dictation with readiness and correctness,	4	21
,, to work a question correctly in the Simple Rules of Arithmetic,	26	40

APPENDIX H.

I. Reports on District Model Schools.

Bailieborough.

	Number.	Number examined.
Able to solve with readiness and correctness questions in Proportion, Practice, and the ordinary Rules of Commercial Arithmetic,	7	10
,, to write fairly,	25	51
,, to write a good hand with ease and freedom,	13	51
,, to answer fairly on the Map of the World,	30	40
,, to answer fairly on Mathematical and Physical Geography,	17	21
,, to work fairly a few Problems on the Terrestrial Globe,	8	21
Possessing a respectable knowledge of the Spelling-Book Superseded,	36	61
Possessing a respectable knowledge of the Agricultural Class-Book,	12	21
Acquainted with the great Outlines of Natural History,	26	51
Tolerably acquainted with Sketches of Ancient, Modern, and English History,	14	21
Possessing a tolerable knowledge of the First Book of Euclid,	16	21
Fairly acquainted with Mensuration of Superficies,	17	21
Acquainted with the Elementary Rules of Algebra,	5	21
Able to solve Simple Equations with tolerable accuracy,	15	21
Acquainted with the first Two Sets of Book-keeping,	14	21
,, Easy Lessons on Money Matters,	10	10
,, Easy Lessons on Reasoning (Part I).	3	10

Proficiency of Pupils—Girls' Department.—Of the girls examined, there were—

Able to read Second Book and Sequel with tolerable accuracy,	12	28
,, to read Second Book and Sequel with ease and correctness,	16	28
,, to read Third and Higher Books with ease and intelligence,	18	21
Acquainted with the Parts of Speech,	36	51
Able to parse and apply the Rules of Syntax,	19	21
,, to write a sentence from dictation with tolerable accuracy,	6	21
,, to write a sentence from dictation with readiness and correctness,	15	21
,, to work a question correctly in the Simple Rules of Arithmetic,	32	59
,, to solve with readiness and correctness questions in Proportion, Practice, and the ordinary Rules of Commercial Arithmetic,	9	13
,, to write fairly,	22	49
,, to write a good hand with ease and freedom,	25	49
,, to answer fairly on the Map of the World,	37	51
,, to answer fairly on Mathematical and Physical Geography,	21	21
,, to work fairly a few Problems on the Terrestrial Globe,	10	21
Possessing a respectable knowledge of the Spelling-Book Superseded,	41	72
Possessing some acquaintance with English Composition,	8	13
Acquainted with the great Outlines of Natural History,	38	49
Tolerably acquainted with Sketches of Ancient, Modern, and English History,	16	21
Acquainted with plain sewing and knitting,	45	72
Acquainted with fancy work,	18	21

Public Examination, &c.—In order that the distribution of premiums should immediately precede the summer vacation, the Public Examination was deferred till 3rd July. On that day, besides a greater number of the parents and relatives of the children than could be accommodated in the Examination room, the proceedings were attended by Rev. Frederick Fitzpatrick, Rector of Bailieborough; Rev. Frederick Fitzpatrick, junior, Curate of Bailieborough; Very Rev. P. O'Reilly, P.P., of Bailieborough; Rev. James Dunne, R. C. C., Bailieborough; and Rev. William Bell, Presbyterian Minister, Bailieborough. That the parents and relatives of the children should have an opportunity of knowing, even in part, the value of the Teachers in this institution, we made arrangements, as on a former occasion, that the Head Master, Head Mistress, and Agricultural Teacher should examine, publicly, one or more classes. In the Girls' School the Senior Classes were examined in Reading, Poetry, Parsing, Derivations, and Mental Arithmetic; the Junior Classes in Tables, Mental Arithmetic, and Geography. The pupils of the Boys' School were examined on Geography, Mental Arithmetic, Book-keeping, Algebra, Geometry, Money Matters, &c.; and a long, interesting, and searching examination on the programme for the Agricultural Class (See Note B), by the Agricultural Teacher, concluded the examinations. The course of examination, as will be seen, ranged from the elementary department to some of the most useful branches of science; and the answering in each exhibited, if not a perfect, at least a well digested, knowledge of the respective subjects.

Vocal Music.—The singing, by a select class of boys and girls, of pieces from Hullah's Manual, filled up the intervals between the examination of each class, and appeared to afford much gratification to the visitors.

Premiums.—The £10 allowed by the Commissioners, in premiums to the most deserving and best conducted children in both Schools, were next distributed. A poetical address, written by the Head Master, and suited to the occasion, was very effectively recited by one of the boys belonging to the School, which was followed by the National Anthem, sung in full chorus.

List of Premiums.

Boys' School.

	£	*s.*	*d.*
First Class.—One Premium of 2*s.* 6*d.*; one of 3*s.*	0	5	6
Second Class.—One Premium of 3*s.*; two of 4*s.*	0	11	0
Sequel Class.—One Premium of 4*s.*; two of 5*s.*	0	14	0
Third Class.—One Premium of 6*s.*; one of 6*s.* 6*d.*	0	12	6
Fourth Class.—One Premium of 7*s.*; one of 7*s.* 6*d.*	0	14	6
Agriculture.—One Premium of 4*s.* 6*d.*; four of 5*s.*; one of 5*s.* 6*d.*; one of 6*s.*; one of 6*s.* 6*d.*	2	2	6
	£5	0	0

APPENDIX H.

I. Reports on District Model Schools.

Bailieborough.

GIRLS' SCHOOL.

	£	s.	d.
First Class.—Two Premiums of 2*s.*; two of 2*s.* 6*d.* .	0	9	0
Second Class.—Two Premiums of 2*s.* 6*d.*; two of 3*s.* .	0	11	0
Sequel Class.—One Premium of 3*s.*; one of 4*s.*; one of 5*s.*	0	12	0
Third Class.—One Premium of 5*s.* 6*d.*	0	5	6
Fourth Class.—Two Premiums of 6*s.* 6*d.*; two of 7*s.*	1	7	0
Needlework.—Six Premiums of 2*s.* 6*d.*; two of 3*s.*; three of 3*s.* 6*d.*; one of 4*s.*	1	15	6
	£5	0	0

Attendance, &c.—Since the opening of the Schools the attendance has been steadily increasing, as will appear from the *average daily attendance* of pupils for each year, exhibited by the following table:—

Year.	Boys.	Girls.	Total.
1850,	47	40	87
1851,	48	39	87
1852,	57	58	115

Of 34 boys permanently struck off the rolls of the School during the year 1852—

1 was appointed Pupil-Teacher.
2 were appointed Agricultural Pupil-Boarders.
1 was appointed as a Substitute-Teacher.
1 reading Classics in Belfast.
1 apprenticed to a shopkeeper in Dublin.
3 emigrated.
3 left the neighbourhood.
22 employed at home.

Of 45 Girls permanently struck off the rolls of the School during the year 1852—

2 were appointed Paid Monitresses in Bailieborough District Model School.
1 was appointed Teacher of a N. S.
1 was appointed Paid Monitress in a N. S.
2 went to a Boarding School.
1 was employed in a shop.
4 emigrated.
20 were employed at home.
14 were struck off for irregular attendance.

During the week ending 18th December, 1852, in which we last conjointly held examinations of the Pupil-Teachers, Agricultural Pupils, and Paid Monitresses in the Bailieborough District Model School, the classification of the 90 boys and 82 girls, then on the rolls, was as follows:—

	Boys.	Girls.
First Book of Lessons, ...	20	20
Second Book of Lessons, ...	26	22
Sequel to ditto, ...	18	9
Third Book of Lessons, ...	14	17
Fourth Book of Lessons, ...	12	14
Selections from the British Poets, . . .	12	14
Elements of Grammar, ...	64	51
Parsing and Syntax, ...	26	31
Descriptive Geography, ...	90	82
Mathematical Geography, ...	26	31

	Boys.	Girls.
Arithmetical Tables,	90	82
Simple Rules of Arithmetic,	46	51
Compound Rules, and Reduction,	18	17
Proportion, and above,	26	14
Mental Arithmetic,	90	82
Geometry,	26	–
Algebra,	26	–
Mensuration,	26	–
Book-keeping,	26	–
Lessons on Reasoning,	12	–
Sacred Poetry,	64	51
Outlines of Natural History,	90	82
Writing on slates,	26	20
,, on paper,	64	62
,, from dictation,	44	40
Vocal Music,	90	82

BRANCHES FOR FEMALES.

Sewing,	–	82
Knitting,	–	82
Fancy-work,	–	16

Of these there were—

	Boys.	Girls.
At 5*s.* per quarter,	8	9
At 2*s.* 6*d.* per quarter,	31	18
At 1*s.* 1*d.* per quarter,	51	55
Total,	90	82

The ages of whom are as follow:—

	Boys.	Girls.	Total.		Boys.	Girls.	Total.
4 years,	2	–	2	12 years,	8	10	18
5 ,,	–	2	2	13 ,,	5	4	9
6 ,,	4	4	8	14 ,,	4	11	15
7 ,,	4	6	10	15 ,,	8	5	13
8 ,,	8	10	18	16 ,,	7	2	9
9 ,,	12	4	16	17 ,,	2	–	2
10 ,,	12	14	26	18 ,,	–	–	–
11 ,,	14	9	23	23 ,,	–	1	1

The average age of each Boy, . . . 11 years.
,, ,, Girl, . . . 10·8 ,,

The average age of the pupils of both Schools is *under* eleven years, forty of whom, or about one-fourth of the whole are eight years of age or under, and should be in an Infant School.

Of these 172 children on the Rolls, for the week ending 18th December, 1852, there were of the—

	Boys.	Girls.	Total.
Established Church,	27	23	50
Roman Catholics,	53	41	94
Presbyterians,	10	18	28
Total,	90	82	172

APPENDIX H.

I. Reports on District Model Schools.

Bailieborough.

The following Table will show the occupation of the parents of 172 pupils on the Rolls on the 18th December, 1852 :—

	Boys.	Girls.
Attorney's Clerk,	–	1
Baker,	1	1
Bandmaster,	–	2
Blacksmith,	1	2
Brogue Maker,	1	2
Butcher,	4	2
Carpenter,	3	1
Chandler,	–	1
Constable,	9	4
Cooper,	2	1
Dealer in Provisions,	3	–
Doctor,	–	1
Farmer,	18	21
Hotel Keeper,	3	1
Labourer,	16	16
Officer of Excise,	1	2
Painter,	–	2
Pensioner,	–	2
Publican,	8	4
Servant,	2	2
Shopkeeper,	5	3
Stone Mason,	1	2
Tailor,	4	2
Teacher,	1	1
Watchmaker,	1	2
Woollen Draper,	4	4
Orphans,	2	–
	90	82

Whilst each religious profession, and every social grade in the town and neighbourhood of Bailieborough, are here found fully represented, and in the proportions in which they exist in the locality, it is a gratifying fact to observe, that two classes (farmers and labourers), for whose especial benefit and instruction the agricultural department has been engrafted on this institution, have not been slow to avail themselves of its advantages. An education of eminent practical utility has here been brought within the reach of all classes, and such has been the value set upon it, that several persons, at considerable expense and inconvenience, have taken lodgings in the town and neighbourhood, to enjoy the benefits of the institution.

Attached to the Weekly Report on these schools, for week ending 2nd October last, was forwarded to the office, for the information of the Commissioners, a list giving the names, age, religious denomination, &c., of 13 boys and 30 girls, who since the opening of the schools, had taken lodgings in the town or precincts, for the purpose of attending them. Of the 13 boys 9 were Roman Catholics, 3 Presbyterians, and 1 of the Established Church. Of the 30 girls, 26 were Roman Catholics, and 4 Presbyterians. In the same return was given the destination on removal of those who had left, from which it

appeared that 4 became Teachers, 2 Agricultural Pupils, 2 Shopkeepers, 1 a University Student, 4 were apprenticed, 4 emigrated, the remainder were employed at home.

Of those attending from distant localities—

The homes of	11	were	4	miles from Ballieborough.
,,	6	,,	5	,,
,,	4	,,	6	,,
,,	6	,,	7	,,
,,	10	,,	8	,,
,,	1	,,	9	,,
,,	1	,,	12	,,
,,	3	,,	14	,,
,,	1	,,	25	,,

Some highly respectable parties have applied to the Head Master, during the year, to take private boarders, but the nature of his duties and other circumstances, render this impracticable.

Agriculture.—The instruction of the Third and Fourth Classes, and a few of the more grown boys of the Sequel Class in this branch, continues to be carried on with energy and vigour. The subjects upon which they were prepared to be examined previously to the Public Examination (see programme for this class, Note C.) and the readiness and intelligence of their answering induced us to give eight premiums this year in this department.

Needlework.—The Workmistress gives instruction to all the girls in needlework, of a domestic character, making and mending the various articles of their own attire, cutting out, knitting, netting, and Berlin work, and with a success which has frequently elicited the marked approval of parties qualified to speak on the subject. We awarded twelve premiums for proficiency in the different departments of needlework.

Visiters.—During the course of the year, the establishment was visited by a considerable number of highly respectable parties, and the reports of their impressions as to state of schools, farms, &c., entered in the Visiters' Observation Book, are highly favourable. Amongst some of those who visited, may be mentioned—The Right Honourable Sir John Young, Bart., Chief Secretary for Ireland; Lady Young; Lord Talbot de Malahide; Gustavus Tuite Dalton, Esq.; William Ruxton, Esq.; Rev. William Prior Moore; Rev. J. C. Wilcocks; Rev. Edward Groome; Joseph Dickson, Esq., J. P.; Vesey Thomas Dawson, Esq.; C. Brinsley Marlay, Esq., London; Henry Shaw, Esq., &c., &c.

Order, Discipline, &c.—At our periodical visits during the year, we have had reason to be pleased with the order and discipline observed in the Schools, and the personal tidiness of the pupils attending them, particularly the girls.

The same Teachers under whom the Schools opened, are still in charge; and though all belong to different religious persuasions, as likewise their assistants, the Pupil-Teachers and paid Monitresses, it gives us much satisfaction to be in a

APPENDIX H.

I Reports on District Model Schools.

Bailieborough.

position to state, that not only has no disagreement on the subject of religion ever occurred amongst them, but that, on the contrary, they have at all times cordially co-operated with one another and with us, in carrying out the rules of the institution for the public good. And the same spirit of mutual charity and Christian forbearance has already made itself manifest in the behaviour of the children towards each other. Here the pupils meet on equal terms; there is no supremacy, no class exclusion to peril the success of conscientious merit. They are taught to love one another; and while their hearts are yet tender, and their affections green and young, they acquire that face to face knowledge of each other, that affectionate confidence and warm sympathy, which we trust will subsist through life.

Suggestions.—The distance from the hall-door of the dwelling-house to the School door is three furlongs and six perches, or nearly half an English mile. This distance has been found on several occasions inconvenient; to obviate which, we beg to suggest, that a School-room for the boys be erected, contiguous to the residence of the Head Master, Agricultural Pupils, &c., which, forming an additional wing, would just complete the symmetry of the building. And as several of the parents, as well as the clergy and other respectable parties, have expressed a desire to have an Infant School established in Bailieborough, the present School-room for the boys might be readily adapted to that purpose.

We also beg to suggest, that drawing and vocal music, under persons sent specially for the purpose of introducing and teaching these arts, be made, as soon as practicable, to constitute portions of the instruction given in these Schools.

We have the honour to be, Gentlemen, your obedient servants,

JAMES PATTEN, Head Inspector.
EUGENE A. CONWELL, District Inspector.

The Secretaries, Education Office.

Note A.

List of all the Pupil-Teachers who have entered the Ballieborough District Model School, from opening till 31st December, 1852.

Names.	Age.	Religious Denomination.	Former employment.	Where educated.	When appointed.	Date of leaving.	Destination.
Samuel Thistle, .	17	Estab. C.	Employed on Father's Farm,	Dromecarrow N. S. .	3rd June,'50,	3rd June, '51,	Military Schoolmaster.
Samuel Parker, .	20	Presbyterian,	Ditto, . .	Dromecarrow N. S. .	10th June,'50,	1st Mar., '51,	Became an Agricul. Pupil Boarder.
Michael Boylan, .	20	R. Catholic,	Paid Monitor, .	Lisniskea N. S. .	10th June,'50,	2nd April,'51,	Literary Teacher in Farrahy Mod. Agricultural N. S., Co. Cork.
Peter Clarke, .	17	R. Catholic,	Teacher of N. S. .	Cullies N. S. . .	13th June,'50,	13th June,'51,	Literary Teacher, Derrycastle Mod. Agricultural S., Co. Tipperary.
Thomas Boyle, .	17	R. Catholic,	Pupil in B. D. M. S	Nolagh & B. D. M. S.	16th May, '51,	16th May, '52,	Teacher of Kill N. S., Co. Cavan.
Thomas Hall, .	17	Presbyterian,	Ditto, . .	Lear & B. D. M. N. S.	19th May, '51,	16th May, '52,	Teacher of Killigorman N. I., Co. Monaghan.
George Hall, .	18	R. Catholic,	Teacher, Killcross-duff N. S.	Killinkere, Doon, and Virginia N. S.	10th June,'51,	8th June, '52,	Teacher of Coolderry N. S., Co. Monaghan.
Patrick M'Namee,	19	R. Catholic,	Paid Monitor, .	Doon & Virginia N. S.	13th June, '51,	8th June, '52,	Teacher of Castleraghan N. S., Co. Cavan.
Richard Heaslip, .	17	Estab. C.	Pupil in . . .	B. D. Model School,	17th May, '52,	—	—
Bernard Agnew, .	17	R. Catholic,	Paid Monitor, .	Coolfore and Drumlusty N. S.	17th May, '52,	—	—
James M'Donnell,	19	R. Catholic,	Pupil in . . .	Cullow N. S. . .	9th June,'52,	—	—
William Parlan, .	17	R. Catholic,	Ditto, . .	Virginia N. S. . .	14th June,'52,	—	—

NOTE A—*continued.*

LIST of all the AGRICULTURAL PUPIL-BOARDERS who have entered the BAILIEBOROUGH DISTRICT MODEL SCHOOL, from opening till 31st December, 1852.

Names.	Age.	Religious Denomination.	Former employment.	Where educated.	When appointed.	Date of leaving.	Destination.
Patrick Clarke,	16	R. Catholic,	Paid Monitor in	Geevagh N. S.	24th June, '50,	31st May, '51,	Summoned to Glasnevin Model Farm.
Joseph Burns,	17	Presbyterian,	A Pupil,	Dromecarrow N. S.	3rd July, '50,	3rd July, '51,	Glasnevin.
Samuel Gibson,	16	Presbyterian,	Engaged at Farming.	Lear Hib. Society S.	3rd July, '50,	9th Sep, '50,	Employed on Father's Farm.
Samuel Parker,	21	Presbyterian,	Pupil Teacher,	Dromecarrow N. S.	1st Mar., '51,	1st Sep., '51,	Summoned to Glasnevin.
Jas. John M'Ness,	18	R. Catholic,	At School,	Eton College (Galway)	1st Mar., '51,	16th Nov., '51,	Removed to home.
Robert Burns,	18	Presbyterian,	Attending a N. S.	Finteraaght N. S.	22nd July, '51,	3rd July, '52,	In Glasnevin.
James Wiggins,	17	Presbyterian,	At School,	Ardmoan & B.D.M.S.	9th Aug., '51,	28th July, '52,	Do.
Henry Clarke,	18	Estab. C.	Ditto,	Killinkere N. S.	2nd Jan., '52,	—	—
James Crossan,	17	R. Catholic,	Ditto,	Private S. & B. D. M.	20th Jan., '52,	—	—
Thomas M'Cabe,	18	R. Catholic,	Ditto,	Durham & B.D.M.S.	16th Aug., '52,	—	—
Hamilton Bell,	17	R. Catholic,	Ditto,	B. D. Model School,	1st Sep, '52,	—	

LIST of all the PAID-MONITRESSES who have entered the BAILIEBOROUGH DISTRICT MODEL SCHOOL, from opening till 31st December, 1852.

Names.	Age.	Religious Denomination.	Where educated.	When appointed.	Date of leaving.	Destination.
Mary Quoyle,	18	R. Catholic,	Begliff N. S.	7th May, 1850,	1st July, 1851,	Appointed Teacher of Lattoon Female N. S.
Eliza Mahaffy,	14	Presbyterian,	Ardmone N. S.	7th May, 1850,	31st August, 1852,	" " " Ardmone Female N. S.
Mary Reilly,	15	R. Catholic,	Bailieboro' Dist. Mod. S. and others,	1st July, 1850,	2nd April, 1852,	" " " Lattoon Female N. S.
Anne King,	16	Estab. Church,	Ditto,	1st July, 1850,	1st May, 1852.	" " " Bailieboro' Lodge Indus. S.
Maria J. Wilson,	14	Estab. Church,	Bailieboro' D. M. S.	1st July, 1851,	—	Still in the Establishment.
Margaret King,	15	R. Catholic,	Ditto,	1st Nov., 1851,	—	Ditto.
Margaret Sweeny,	15	R. Catholic,	Ditto,	11th May, 1852,	—	Ditto.
Anne J. Stewart,	13	Presbyterian,	Ditto,	11th May, 1852,	—	Ditto.

NOTE B.

RESULTS of the EXAMINATION of RESIDENT PUPIL-TEACHERS and AGRICULTURAL PUPILS in the BAILIEBOROUGH DISTRICT MODEL SCHOOL. Examined 13th May, 1852.

	Years of age.	Religious Denomination.	Months in Training.	Method of Teaching.	Writing.	English Language.						Geography.	Mathematics, &c.					Lesson Books.	Lessons on Reasoning.	Lessons on Money Matters.	Agricultural Class Book.	History.	Natural History.	Natural Philosophy.
						Reading.	Grammar.	Parsing.	Derivation of words.	Spelling-Bk. Superseded.	Writing from Dictation.	Composition.	Mathematical & Physical.	Descriptive—Tracing Blank Maps.	Arithmetic.	Geometry.	Mensuration.	Algebra.	Book-keeping.						
Agricul. Pupils.	18	R. C.,	12	A	A	B	B	B	B	A^2	A	B	B	A^2	B	A^2	B	B	B	B	B	B	A^2	B
	18	Presb.,	12	A	A	B	B	A^2	B^3	A	A	B^2	B	A	A	A	B	A	A	B	B	B	A^2	A
	19	R. C.,	11	B	A^2	B	B^3	A^2	B^3	A	A	B	B^2	A^2	B	B^2	C	B^5	B^2	B	B	B	A^2	C	B
	20	R. C.,	11	B	B^2	B^2	B^3	B	C^2	A	B^2	C	C	A^2	C	B^2	C	B^2	B^2	B	B	B	B	C	C
Pupil-Teachers.	19	Presb.,	9	–	B	B^3	B^2	A^2	D	B^5	B	B	B	A^3	B	C	A	C	B	B	C	C	B^2	C	C
	19	Presb.,	10	–	B	C	C	B	C^2	B^4	B^2	C	B^2	B^3	C	C	D	D	B	B	B	B	B^3	C	B
	18	E. C.,	5	–	C	B^3	C^2	B^2	C^2	B^4	C	C^2	C	C^2	C	C	D	D	C	B	C	C	C^2	D^4	C
	17	R. C.,	4	–	C	B^3	C	C^3	D	C^2	C	C	C	C^2	D	C	D	D	C	C	C	C	C	D^4	D

N.B.—The letters A, B, C, D, and E, signify, respectively, "Excellent or Very Good," "Good," "Middling or Tolerable," "Bad," "Very Bad;" the indices 1, 2, 3, 4, exhibiting slight shades of difference.

APPENDIX H.

I. Reports on District Model Schools.

Bailieborough.

NOTE B.—*continued.*

RESULTS of the EXAMINATION of the RESIDENT PUPIL-TEACHERS and AGRICULTURAL PUPILS in the BAILIEBOROUGH DISTRICT MODEL SCHOOL. Examined 15th December, 1852.

Agricul. Pupils.	Pupil-Teachers.	Years of age.	Religious Denomination.	Months in Training.	Method of Teaching.	Writing.	English Language.								Mathematics, &c.					Geography.		Lesson Books.	Lessons on Reasoning.	Lessons on Money Matters.	Agricultural Class Book.	History.	Natural History.	Natural Philosophy.
							Reading.	Grammar.	Parsing.	Derivation of words.	Spelling-Bk. Superseded.	Writing from Dictation.	Composition.		Mathematical & Physical.	Descriptive—Tracing Blank Maps.	Arithmetic.	Geometry.	Mensuration.	Algebra.	Book-keeping.								
		17½	R. C.,	7	B²	B	C²	B	B	C	B	B	C³		C	B²	D	B	D	C	C		C	B	B	B	B	B	C³
		17½	R. C.,	7	C	B	B³	B	B	C	C	B	C³		B	B	B	B	B	B	B		B	C	B	B	B	B	B
		18	E. C.,	7	B	B	B²	B	B	B²	B	B	C		C	B	C	C	C	B	B		B	B	C³	A	D	B	C³
		19	R. C.,	7	B	B	B²	B	B	C	D	C	C		D	C	B	C	D	C	C		C	B	B	B	B	B	B
		19	E. C.,	11½	B	B	C³	C	C	C²	C³	B	C³		D	D	C³	B	C³	B	D		C³	C³	C³	C³	B	B	C³
		17½	R. C.,	11	—	B	D	D	D	D	D	C	B²		D	C	B	C	D	B	B		C³	C	C	B	D	C³	B
		18	R. C.,	4	—	B	C	B	B	B	B	B	C		B	D	B	B	C	C	C		B	B	C	A	B	B	C
		17	R. C.,	3½	—	C	B	B	B	B	B	B	C		B	A	B	A	B	B	C		B	B	B	A	B	B	C

NOTE B.—*continued.*

RESULTS of the EXAMINATION of PAID MONITRESSES (and CANDIDATES for two Vacancies in that Office) in the BALLIEBOROUGH DISTRICT MODEL SCHOOL. Examined 11th May, 1852.

Candidates.	Years of Age.	Religious Denomination.	Months in Training.	Method of Teaching.	Writing.	English Language.						Geography.		Arithmetic.	Lesson Books.	History.	Natural History.	Needlework.
						Reading.	Grammar.	Parsing.	Derivation of words.	Spelling-Bk. Superseded.	Writing from Dictation.	Composition.	Mathematical & Physical.	Description—Tracing Blank Maps.				
	15	E. C.,	9	A	A^2	A^2	A^2	A^2	A^2	B^2	A	B	B	A^2	B	A	B	B
	15	R. C.,	6	A^2	A^2	B^2	A^2	A^2	A^3	B^2	B	C	C	A^2	C	A^2	B	B
	15	R. C.,	—	A^2	A^2	A^3	A^2	A^2	A^2	B^2	A^2	C	C	A^2	C	B	C	C
	15	R. C.,	—	A^2	A^2	A^2	B^2	B^2	B^3	B	B^2	A^3	C	A^2	C	B	B^2	B
	*15	R. C.,	—	B	A	A^2	B^2	B^2	B	B^2	A^3	B	C	B	C	A	B	B
	16	R. C.,	—	B	B	B^2	D	D	A^2	A^2	B	B^2	C	B	C	C	C	C
	*13	Pres.,	—	D	B	A	D	D	B	A^2	B^2	C	C	C	C	C	C	C
	15	Pres.,	—	D	D	B^2	D	D	C	B^2	D	D	C	C	C	C	D	C
	15	R. C.,	—	C	C	B^3	D	D	B^2	A^2	D^3	D	C	A^3	B	B	D	C
	16	R. C.,	—	B	A^2	B^2	B^1	A^2	B^3	A^2	A^3	B^2	B	A^2	B	B	A	C

N. B.—The two names marked * were selected for the Vacancies.

NOTE B.—*continued.*

RESULTS of the EXAMINATION of PAID MONITRESSES in the BAILLEBOROUGH DISTRICT MODEL SCHOOL.
Examined 16th December, 1852.

Years of Age.	Religious Denomination.	Months in Training.	Method of Teaching.	Writing.	English Language.							Geography.		Arithmetic.	Lesson Books.	History.	Natural History.	Needlework.
					Reading.	Grammar.	Parsing.	Derivation of words.	Spell-Bk. Superseded.	Writing from Dictation.	Composition.	Mathematical and Physical.	Descriptive—Tracing Blank Maps.					
16	E. C., .	18	A	A	B	B	B	B	A	A	B	B	A	B	B	A	B	A
16	R. C., .	13	B	A	B	B	B	B	A	A	C	B	A^2	A	B^3	B	B	B
16	R. C., .	8	–	A	B	B	B	B	A	B	C	B	A^2	C	B^3	B	B	B
14	Presb., .	8	–	A	B	B^2	B^2	B	A	B	B	B	B	C	C	B	B	B

NOTE C.

Bailieborough.

LIST of PUPILS in the BAILIEBOROUGH DISTRICT MODEL SCHOOL, from opening till 31st December, 1852, who have become Teachers, Pupil-Teachers, Agricultural Pupils, or Paid Monitresses.

Names.	Age.	Religious Denominations.	Destination.
John Sullivan, .	15	R. C.,	Substitute Teacher in a N. S.
William Clisdell, .	18	Presb.,	Do.
Thomas Hall, . .	16	Presb.,	A Pupil-Teacher.
Samuel Parker, .	19	Presb.,	Do.
Richard Heaslip, .	17	E. C.,	Do.
Thomas Boyle, .	18	R. C.,	Do.
Joseph Burns, .	16	Presb.,	Agricultural Pupil Boarder. B. D. M.
James Wiggins, .	17	Presb.,	Free do. B. D. M. N. S.
Robert Burns, .	18	Presb.,	Agricultural Pupil Boarder, B. D. M.
James Crossan, .	17	R. C.,	Do.
Thomas M'Cabe, .	18	R. C.,	Do.
Hamilton Bell, .	16	R. C.,	Free do. B. D. M.
Samuel Bell, . .	19	R. C.,	Free do. Hanaghy, county Cork.
John Wauhope, .	18	Presb.,	Agricultural Pupil Boarder in Kilwaughter Nat. School., county Antrim.
Mary Quoyle, .	18	R. C.,	Teacher of a Nat. School.
Mary Reilly, . .	15	R. C.,	Do.
Anne King, . .	16	E. C.,	Teacher of an Indus. School.
Eliza Mahaffy, .	14	Presb.,	Teacher of a Nat. School.
Maria Wilson, .	14	E. C.,	Paid Monitress in D. M. S.
Margaret King, .	15	R. C.,	Do.
Margaret Sweeny, .	15	R. C ,	Do.
Anne J. Stewart, .	13	Presb.,	Do.
Mary Tighe, . .	16	R. C.,	Teacher in a Nat. School.
Susan Gallagan, .	16	R. C.,	Paid Monitress in a N. School.
Margaret Finnegan,	16	R. C.,	Substitute Teacher in a N. S.

NOTE D.

AMOUNT of SCHOOL REQUISITES purchased by the PUPILS, and SCHOOL FEES received during the year 1852.

Year.	Month.	Amount of School Requisites purchased.		Amount of School Fees received.	
		Boys.	Girls.	Boys.	Girls.
		£ s. d.	£ s. d.	£ s. d.	£ s. d.
1852.	January,	0 14 0	0 5 2	2 16 9	3 1 8
,,	February,	1 7 11	0 13 3	1 12 8	2 3 9
,,	March,	0 7 $0\frac{1}{2}$	0 7 1	1 4 2	0 18 10
,,	April,	0 5 $8\frac{1}{2}$	0 0 $10\frac{1}{2}$	1 10 7	3 0 8
,,	May,	0 11 5	0 6 8	2 6 0	1 18 6
,,	June,	0 10 0	0 18 8	1 14 0	1 10 3
,,	July,	0 4 $2\frac{1}{2}$	0 1 1	2 2 1	2 15 0
,,	August,	0 19 1	0 9 $11\frac{1}{2}$	2 0 9	2 6 9
,,	September,	1 5 $7\frac{1}{2}$	0 2 8	2 2 6	1 8 9
,,	October,	0 3 $8\frac{1}{2}$	0 11 8	2 3 10	3 4 6
,,	November,	0 16 6	0 18 $7\frac{1}{2}$	3 3 5	1 3 1
,,	December,	0 9 3	0 13 $2\frac{1}{2}$	1 4 8	0 11 3
	Total,	7 14 $5\frac{1}{2}$	5 8 11	24 1 5	24 3 0

Note E.

Programme of Study prepared for Examinations, 1852.—Boys' Department.

First Class.—Lesson Book: Junior Division—Reading and Spelling words of two or three letters; Senior Division—Reading, Spelling, and Explanations of words as far as page 30. English Grammar: Junior Division—can tell the names of the Parts of Speech; Senior Division—can point out Nouns, Articles, and Verbs in their lessons. Spelling Book Superseded: Junior Division—know two columns of Verbal Distinctions; Senior Division—Verbal Distinctions, from page 19 to 24, and one Rule for Spelling. Geography: all can point out, on Map of the World, the great divisions of land and water, the principal countries, and tell some of their productions. Arithmetic: Notation and Numeration—Junior Division—can read to hundreds; Senior Division—to thousands; know something of the theory of Addition, and can work some easy exercises on slates, or black-board; know part of the Multiplication and Pence Tables, and two Rules for Mental Arithmetic, Board's Treatise. Natural History: can tell the great division, class, and order to which each animal referred to in their lessons belongs. Writing: letters and words on slates. Sacred Poetry: can repeat four selections.

Second Class.—Lesson Book: Reading, Spelling, and Explanation, as far as page 81; know something of Punctuation. English Grammar: can point out the principal Parts of Speech in their lesson. Spelling Book Superseded: Verbal Distinctions, parts First and Second, and two Rules for Spelling. Geography: same as First Class; the Definitions in "Sullivan's Introduction to Geography and History," and Outline of the Map of Europe. Arithmetic: can work, on slate or black-board, easy exercises in Addition and Subtraction; three Rules in Mental Arithmetic; know Troy weight, Avoirdupois weight, Apothecaries, Wool, Hay, and Straw weights; Long Measure, Cloth Measure, Measure of Capacity; Multiplication, Pence, and Time Tables. Notation and Numeration: can read and write as far as tens of thousands. Natural History: can name the great division, class, and order to which each animal referred to in their lesson belongs. Writing: the majority write on paper; all write on slates, occasionally. Sacred Poetry: can repeat ten selections.

Sequel Class.—Lesson Book: Reading, Spelling, and Explanations, to page 55; a fair knowledge of Punctuation. English Grammar: know the large print in Sullivan's English Grammar, to page 41, and parse a sentence Etymologically in their Lesson Book. Spelling Book Superseded: Verbal Distinctions, parts First and Second, the Rules for Spelling, and to write from dictation. Geography: same as First and Second Classes, and Outlines of Maps of England and America. Arithmetic:

can work exercises in the Simple and Compound Rules, and Reduction of Money; knows six Rules for Mental Arithmetic. Notation and Numeration: can write or read as far as millions, all the Arithmetical Tables. Natural History: are acquainted with the outline given in their Lesson Book. Writing: from copy-pieces on paper; from dictation on slates. Sacred Poetry: can repeat twelve selections.

Third Class.—Lesson Book: Reading, Spelling, Explanations, and Derivations, as far as page 118. English Grammar: know the large print as far as page 107, and can parse a sentence. Spelling Book Superseded: all the Verbal Distinctions, the Rules for Spelling, and the Affixes, Prefixes, and Latin Roots. Geography: same as Junior Classes, and Outlines of Maps of England, Ireland, Scotland, Asia, Africa, and America; three chapters in Mathematical Geography. Arithmetic: to the end of Proportion, the Arithmetical Tables, Notation, Numeration, and ten Rules for Mental Arithmetic. Book-Keeping: two sets in Board's Treatise. Mensuration: first four Problems in Superficies, and two in Timber Measure. Algebra: Definitions; can work easy exercises in Addition, and a few Simple Equations. Geometry: Definitions, and some Propositions in First Book of Euclid. Natural History: can tell the class, &c., of the animals mentioned in their lessons. Money Matters: the lessons on Money, Exchange, Commerce, and Coin. Agriculture: see Programme, as given by Agriculturist.

Fourth Class.—Lesson Book: the whole of the Book, Explanations, Derivations, &c., &c., &c. Sullivan's Spelling Book Superseded: all the Verbal Distinctions; Rules for Spelling; Orthoepy; also Affixes, Prefixes, Latin, and Greek Roots; English Grammar: Sullivan's English Grammar; to parse a sentence, and apply the Rules of Syntax, the Figures of Speech, and Punctuation. Arithmetic: Rules and Exercises to Simple Interest, and Rules for Mental Arithmetic. Geography: Geography Generalized; first six chapters in Mathematical, and from page 163 to 212, in Local. Book-Keeping: four sets in Board's Treatise. Mensuration: first nine Problems in Superficies, and five Problems in Timber Measure. Algebra: Definitions; most of the Simple Rules, and Simple Equations. Geometry: First Book of Euclid; some of the pupils in this class know three books. Political Economy: Easy Lessons on Money Matters. Reasoning: First Part of "Easy Lessons on Reasoning." Natural History: Great Outlines as given in Patterson's Zoological Charts, and Sequel, and Fourth Books. Agriculture: see Programme, as given by Agriculturist. History: the Senior Classes have a fair knowledge of the Sketches of Ancient and Modern History, as given in Doctor Sullivan's books, and in their Lesson Books; and the Fourth Class, know Ancient and Sacred Geography, as given in Geography Generalized, and have some acquaintance with the "Biographical Sketches of the British Poets." Music: all sing the marching song, "Try Again," "The Clock," "The

National Anthem" (in parts); and have a tolerable knowledge of the first part of "Hullah's Manual;" a select class of boys and girls sing the songs in the Manual in parts.

(Signed) ALEXANDER MACDONALD, Head Master.

May, 1852.

NOTE F.

AGRICULTURAL CLASS.

This class includes the Third and Fourth Classes of the Boys' School, and the "Industrial Class," and is prepared to be examined on the following subjects:—

Geology.—Classification of rocks—where they severally appear in the different counties in Ireland—how soils are formed from them—nature and capabilities of such soils, and the practical operations resorted to in the working and improvement of them, such as draining, trenching, subsoiling, &c.

Chemistry.—Division of the elementary bodies—nature and properties of the inorganic constituents of plants, potash, soda, lime, magnesia, silica, phosphoric, and sulphuric acids, &c.—formation of earths, oxides, alkalies, acids, and salts—composition and properties of water and atmospheric air, and their influence upon the animal and vegetable kingdoms.

Vegetable Physiology.—How plants are produced—the different parts of a plant—how each contributes to its growth and completion—how plants receive and are supplied with food from the soil and air—composition of the organic compounds of plants, woody fibre, starch, gum, sugar, gluten, vegetable albumen and casein—how these substances contribute to the support of animals.

Rotations.—The three, four, five, and six courses, and the soils to which they are respectively adapted.

Manures.—The collection and preservation of the several kinds of manures, which a farm produces.

(Signed) JOHN STEWART, Agricultural Teacher.

May, 1852.

NOTE G.

GIRLS' DEPARTMENT.

First Class.—Lesson Book: First Division—the whole of the First Book, and explanation of the words in each lesson. Spelling: the difficult words in the First Lesson Book, and the first twelve columns of the Spelling Book Superseded; together with the first Rule for Spelling. Grammar: can point out the nine Parts of Speech, as they occur in the lessons, and give the definitions of each. Geography: are quite familiar with the great Outlines of the Map of the World, and the

circles marked on it; and can tell some of the productions of the principal countries. Arithmetic: Notation, Numeration, and Addition; the Multiplication Table to twelve times, with Table of Money, Avoirdupois weight, Troy weight, and Cloth Measure. Writing: all can write on slates, and from dictation, the names of the different colours, the days of the week, the months of the year, and the difficult words of each lesson. Natural History: they know the great divisions and classes of animals. Second Division—Spelling and Reading First Lesson Book to page 13. Grammar: can give the definitions of the nine Parts of Speech, and point out the three first on the cards. Geography: Natural History and Arithmetic, same as First Division. Writing: can write 15 letters of the Alphabet.

Second Class.—Lesson Book: the whole of the Second Lesson Book, and explanation of each lesson. Spelling Book Superseded: they know the First Part well, and the three first Rules for Spelling, with their exceptions. Grammar: they have learned, as far as the 40th page, of Sullivan's Grammar, and can refer words to their Parts of Speech. Geography: are intimately acquainted with the Maps of the World, Europe, and America. Arithmetic: Arithmetical Tables, Addition and Subtraction; and can explain the rules for each; the first rule for Mental Arithmetic, as given in the Board's Treatise. Writing: all write copies on paper, and on slates, the first sentence of every reading lesson, from dictation. Natural History: can name the division, class, and order of any animal mentioned in the Lesson Book.

Sequel Class.—Lesson Book, No. I.: to the 125th page, and explanation of lessons, with the Prefixes and Affixes, as they may occur. Spelling Book Superseded: parts First and Second of the Verbal Distinctions, and four Rules for Spelling, pointing out exemplifications and violations as they occur in their lessons. Grammar: are as far advanced in Sullivan's Grammar as Second Class, and can parse simple sentences Etymologically. Geography: Maps of the World and Ireland; 20 pages of the small Treatise on Geography; and are acquainted with the names and uses of the circles on the Map of the World. Arithmetic: Notation and Numeration; the Simple Rules and Arithmetical Tables. Mental Arithmetic: First Rule of Board's Treatise. Writing on paper and from dictation, a sentence from any of the lessons read previously. Natural History: same as Second Class. Poetry: can repeat "The Dormouse," "The Coot," "The Daisy."

Third Class.—Lesson Book: from the First Lesson to the History of Joseph, inclusive; the subject matter of the Lessons in their own words; Prefixes, Affixes, and Derivations; and can give the family of words derived from any given root; they can transpose several of the pieces of poetry in the Lesson Book. Spelling Book Superseded: Parts I. and II. of Verbal Distinctions, and five Rules for Spelling, with their exceptions; can spell and give the meaning of six columns of the difficult

and irregular words in the language; and they have some idea of the principles of Orthoepy. Grammar: know the large print in Sullivan's Grammar, and can parse sentences in prose, Syntactically. Geography: Maps of the World, Europe, and Ireland; the productions of the different countries, and the 10 first pages of the Geography Generalized. Arithmetic: Compound Rules, Arithmetical Tables, and three Rules of Mental Arithmetic, Board's Treatise. Writing: sentences from dictation, illustrative of the Rules for Spelling, and their exceptions; together with passages selected from any of the preceding lessons. Natural History: same as Second Class, but more perfect. Poetry: they can repeat "The Harper," "The Pet Lamb," and several other pieces from the Lesson Book.

Fourth and Fifth Classes.—Lesson Book: the whole of the Fourth Book and Girls' Reading Book; Explanation of Lessons; Greek, Latin, and Saxon Prefixes and Affixes; Derivations and English Etymologies of the words in the lessons; Easy Lessons on Money Matters; Selections from the British Poets: "God, the Author of Nature;" "Human Life;" "The Convict Ship;" "The Lake of Geneva." Spelling Book Superseded: are perfectly acquainted with the whole of it, except Orthoepy, of which, however, they have a fair knowledge; can point out with promptness exemplifications and violations of the Rules for Spelling, whenever they occur in the Reading Lessons. Grammar: can parse the most difficult of the poetical pieces in the Fourth Book and Girls' Reading Book; are familiar with the figures of Rhetoric, and the different kinds of verse. Geography: the first seven chapters of the Geography Generalized, with the historical sketches at the end of it; the Maps of the World, the British Islands, and Palestine. Arithmetic: Proportion (Simple and Compound); Fractions and Practice. Mental Arithmetic: ten rules, Board's Treatise. Writing: pieces of poetry of their own selection from any of the Lesson Books; from dictation, the substance of a fable or anecdote, read slowly twice over, together with letters on given subjects. History: Sketches of Ancient History; Great Britain and Ireland, as given in Sullivan's Introduction to Geography; besides having a fair knowledge of Modern History. Natural History: the divisions, classes, and orders from Patterson's Zoological Charts.

(Signed) Mary Anne Cussen, Head Mistress.

May, 1852.

Note H.

With the design of promoting a spirit of laudable ambition and proper exertion in those studies more immediately connected with their profession (programme of evening study), the Head Master very frequently examines, in a Class, the

Pupil-Teachers and Agricultural Pupil-Boarders, on which occasions they take places according to merit. A record of their standing is kept in a book for that purpose; and the subjoined table, drawn up from this record, exhibits at one view the standing of a late Pupil-Teacher at several such examinations held during *his* year of training.

At incidental examinations of Pupil-Teachers and Agricultural Pupil-Boarders, held by the Head Master, on the following subjects, in the Bailieborough District Model School, A. B. a Pupil-Teacher, was, during his year of Training the—

	First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	Eighth.
In Parsing, ...	1	1	2	3	1	1	0	0
,, Spelling Book Superseded, .	3	11	3	1	0	0	0	0
,, Derivations, ...	10	4	3	0	0	0	0	0
,, Geography, ...	14	1	0	0	1	0	0	1
,, History, ...	14	8	2	0	0	0	1	1
,, Mental Arithmetic, . . .	2	1	1	2	1	1	0	0
,, Practical Arithmetic, . .	1	2	3	0	0	0	0	0
,, Book-keeping, . . .	4	2	3	0	4	2	0	0
,, Algebra, ...	5	2	0	0	0	0	0	0
,, Mensuration, ...	1	3	0	0	0	1	0	1
,, Reasoning, ...	10	4	4	2	0	0	0	0
,, Political Economy, . .	0	5	3	1	1	0	0	0
,, Natural Philosophy, . .	2	3	3	2	1	0	0	0
Total, ...	67	47	27	11	9	5	1	3

Besides the above record of 170 examinations held during this Pupil-Teacher's term of Training, the class was examined on the subjects of Geometry and Natural History, during the time set apart in Evening Programme for these studies.

(Signed) ALEX. MACDONALD, Head Master.

May, 1852

No. 8.—REPORT upon GALWAY DISTRICT MODEL SCHOOL, by EDWARD BUTLER, Esq., A.M., T.C.D., Head Inspector of National Schools.

April, 1853.

GENTLEMEN,—I have the honour to transmit to you my Report upon the Galway District Model School.

Site.—In February, 1850, I was instructed to proceed to Galway, in company with the Board's architect, T. F. Darley, Esq., to select the most eligible of the sites proposed to the Commissioners for the erection of a District Model School. Having made all necessary inquiries, and consulted various local parties interested in the proceedings, from whom we received every facility and all requisite information, we recommended the present site, which, by its size and position, appeared to us most suitable. It contains nearly 4 statute acres, has a southerly aspect, and though a short distance from the town, is readily accessible from all points. The leading road to Clifden passes near to it, and in its proximity are the Queen's College and the Galway Union Workhouse. The Commissioners, acting upon our recommendation, took a lease of the premises, for which they pay an annual rent of £21.

House, &c.—The buildings were commenced in the year 1851, and were finished early in the following year. The design is exceedingly good, the disposition of the house and grounds well considered, and the whole arrangements reflect great credit on the taste and skill of the architect; while the superior manner in which the work is executed, shows that, on the part of the builder, no pains were spared for the due fulfilment of his contract. The house is placed on a terrace, and the grounds in front, which have a gentle slope towards the road, have been levelled and laid down in grass, with neat flower-beds along the walks. The general appearance is most pleasing. In its internal distribution, the house is similar to that in Trim. On the right hand of the hall, as you enter, are the dining-room for Pupil-Teachers, the stairs leading to the second story, the kitchen, with the scullery, servants' room, &c. On the left is a lobby, by which access is had to the Pupil-Teachers' study-room, the Head Master's sitting-room, and the several school-rooms. The second floor is occupied by an infirmary, two rooms for the use of the resident Master, a wash-room, and a dormitory for the Pupil-Teachers. This dormitory, as in the other Model Schools, is divided, by wooden partitions, into 8 separate compartments, one being allotted to each Pupil-Teacher. All the apartments are plainly but neatly furnished.

The boys' school-room is 45 feet long, 25 wide, and 18 high, the ceiling being coved, and those parts of the principals exposed to view being stained in imitation of oak. The desks, with their seats attached, are 24 in number—12 of 8 feet, and 12 of 7 feet—and are arranged in 8 groups of 3 parallel desks each, along the sides of the room. A lesson-post, about 6

feet in height, with a sliding-rod, is provided for every group, and when in use, is placed before the class, in a socket sunk in the floor, a short distance in front of the foremost of the three desks; on this post is hung the black board, or the map, as the case may be.

The religious instruction room serves as a class-room for the boys at the times when it is not used for its own special purpose. It is fitted up with a good sized gallery, where the boys receive collective lessons from the Master, or are instructed in classes by the Pupil-Teachers, when the number in attendance would crowd the school-room to an inconvenient extent.

The girls' department is of the same breadth and height as the boys'; but it is only 30 feet long: a small class-room, with a gallery, is attached to it. There are four groups of desks, each 9 feet long, and there is, besides, sitting accommodation for 20 children.

The room for the infants is provided with a gallery, which would hold 100 children; it has small desks, placed against the walls, for such of the little ones as may be learning to write; and there are 4 lesson-posts, at which the lessons are taught to the several drafts. It is supplied with the ball-frame for arithmetical exercises, maps, reading tablets, picture-lessons, &c.; but as yet no collection of objects has been sent: this very important item in the apparatus for an Infants' School will, it is hoped, be soon provided.

To the various school-rooms are attached closets for the reception of cloaks, bonnets, and caps, wash-rooms, and spacious play-grounds.

Opening of the School.—The Commissioners having given directions for the public opening of the Institution on the 29th of July, notices to this effect were posted, some time previously, throughout Galway, and were published in the local papers; letters were also sent to the resident clergy and gentry of the neighbourhood. The children were first admitted on the 28th of July, when they were classed and arranged by the Teachers in their respective Schools. On the following day, the Resident Commissioner, the Right Hon. Alexander Macdonnell, accompanied by the Secretary, James Kelly, Esq., and the architect, T. F. Darley, Esq., visited the Institution in all its departments, and heard several of the classes taught. There was a large concourse of visitors during the day, who all seemed greatly pleased with what they witnessed.

Visit of the Lord Lieutenant.—A few weeks after the opening of the School, the late Lord Lieutenant, the Earl of Eglinton, and the Countess of Eglinton, on the occasion of their visit to the great cattle show, held in Galway last year, went through the establishment, and spent some time in the different Schools, in each of which they heard the Teachers examine the children. They took a great interest in all they saw, and expressed their satisfaction with the manner in

which the business was conducted. His Excellency was accompanied by the Lord Chancellor, Right Hon. F. Blackburne; his Grace the Duke of Leinster; the Chief Secretary, Lord Naas; Sir T. H. Maddock; R. Griffith, Esq.; Pierce Mahony, Esq., &c.

Teachers.—There are three principal Teachers, one in each department; an Assistant-Mistress in the Infants' School; four Monitresses in the Girls' School, each of whom is paid at the rate of £5 for the first year; and eight Pupil-Teachers in the Boys' School, who reside in the house with the Head Master, and for whose board the Commissioners make a yearly allowance of £16 each.

The Head Master, Mr. Moylan, at the date of his appointment, was conducting the Adult Evening School, and St. John's National School in Limerick. He was a pupil of the Cloyne National School, was trained in the special class in 1848, and at the expiration of the course of training obtained so high a place as third division of first class. At the examination of 1849, he was promoted to the second division of this class; and, in the following year, would have been placed in the highest division, had not the peculiar circumstances of the Evening School, the only one then under his charge, prevented his promotion.*

Miss M'Cormack, the Mistress of the Girls' School, is a native of Galway, and received her education in the Rahoon Female National School, under the nuns of the Presentation Order, at whose recommendation she was appointed, in 1846, to the Galway Workhouse School. She was thence called to Dublin for training in the Marlborough-street establishment, where she was retained on the special class. In 1850, at the recommendation of the Board, she was appointed as Organizing Mistress by the Catholic Poor School Committee in England, and held the office until her appointment to this Model School in July, 1852.†

*Limerick, December 20, 1850.

I hereby certify, that at a public examination in the course of this year, the bearer, Mr. Moylan, Teacher of Limerick Adult Evening National School, was examined by Mr. Kavanagh, Head Inspector, and me, and that we found him a person of superior knowledge and ability; and we were disposed to give him the rank of first division of the first class, which we should have done had the qualifications of his School coincided with his individual merit. And while we regret that it is improbable, under the regulations which govern the School, and which militate against its progress, as must, in fact, be the case in every Evening School, and that we cannot place Mr. Moylan higher than the second division of first class, yet I have great pleasure in assuring him that whenever he shall have charge of a School in which it will be possible for him to display the advantages he is capable of conferring on it, there is not the least doubt of his attaining the very first position as a National Teacher.

(Signed) E. W. BIRMINGHAM,
District Inspector.

† In their Report for the year 1852, the Catholic Poor School Committee refer to Miss M'Cormack in these words:—"The Commit-

The principal Teacher in the Infants' School, Miss Heritage, was educated in the Marlborough-street School, where she was successively employed as Monitress and Pupil-Teacher. The Assistant-Mistress, Miss M'Donogh, was trained in Dublin, in the early part of 1852, for the Oranmore Female National School, from which she was transferred to this Model School on its opening. Before her appointment to the Oranmore School, she had been a pupil at the Newtownsmith Female National School, conducted by ladies of the Order of Mercy in Galway.

The Teachers have been most attentive to their business, and have so discharged their duties in their several departments, as to gain the approbation and confidence of the parents whose children were intrusted to their care.

Miss Heritage is a member of the Established Church, the other three Teachers are Roman Catholics.

Attendance.—The numbers admitted, from the opening of the School on July 28, 1852, to the 28th of February last, were :—

In the Boys' School,	. . . 236
In the Girls' School,	. . . 130
In the Infants' School,	. . . 106

or 472 children in all, of whom 319 were still on the rolls at the latter date. The average number on the rolls, throughout this period of seven months, was 284, and the daily attendance amounted, on an average, to 225 children, or about four-fifths of the number on the rolls. The monthly returns of the attendance, &c., will be seen in the Appendix (A 1).

Ages.—The ages of the boys and girls were as follow :—

7 years,	8	boys and	4	girls.	13 years,	21	boys and	10	girls.
8 ,,	26	,,	12	,,	14 ,,	16	,,	9	,,
9 ,,	17	,,	13	,,	15 ,,	9	,,	2	,,
10 ,,	24	,,	11	,,	16 ,,	6	,,	3	,,
11 ,,	18	,,	6	,,	17 ,,	5	,,	–	,,
12 ,,	22	,,	12	,,	18 ,,	–	,,	2	,,

The average age for both boys and girls is 11 years, and the proportion of children between the ages of 11 and 15 is about 44 per cent. in both Schools; but the proportion of boys under 11 years of age is only 44 per cent., while that of girls is 48, or nearly half the whole number in attendance.

tee's Mistress of Organization having received the offer of an appointment to the Head-Teachership of the Galway Model School, under the Irish Board of Education, accepted an opening so advantageous to her, and left the Committee's service with the esteem and good-will of those for whom she had laboured in England. Nor has her place been supplied, since the Convent Schools, for whose benefit the Committee supported such a Teacher, no longer afford a field for her employment. They are become, in many happy instances, perfect models for the imitation of other Schools. It is a gratification to the Committee to feel that Miss M'Cormack, and her excellent predecessor, Miss Gaynor, assisted in raising to their present perfection the Primary Schools attached to Convents at Birmingham, St. Leonards-on-Sea, Nottingham, York, Glossop, Longton, Clifton, Chelsea, Sunderland, Northampton, and Liverpool."

In the Infants' department there were on the rolls—

1 child of	3 years of age.	25 children of	6 years of age.
15 children	4 ,,	7 ,,	7 ,,
15 ,,	5 ,,		

School Fees and Rates of Payment.—The fees received from the children during the seven months amounted to £84 4*s.* 7*d.*—namely, £46 18*s.* 11*d.* from the boys, £24 10*s.* 11*d.* from the girls, and £12 14*s.* 9*d.* from the infants.

Of the 319 children on the rolls, there were entered—

	Boys.	Girls.	Infants.	Total.
At 5*s.* per quarter, .	39	25	–	64
At 2*s.* 6*d.* per quarter, .	52	26	31	109
At 1*d.* per week, . .	81	33	32	146

The regulations laid down by the Commissioners for the admission of pupils into the District Model Schools, are :—

"That all pupils pay;—that one-half the entire number admissible in the Male and Female Schools, pay 1*d.* per week; that of the other half, 4-7ths be admitted at 2*s.* 6*d.* per quarter, and 3-7ths at 5*s.* per quarter; that, in the Infants' School, 1-4th be required to pay 2*s.* 6*d.* per quarter each, and the rest be admitted at 1*d.* per week.

"That the payments be made in advance; and should the full complement of pupils, at the higher rates, fail to present themselves, the vacant places are to be filled up by those at 1*d.* per week."

In accordance with these regulations, the proper number of places had been reserved in the Galway District Model School for those children who are admissible at one penny per week; but hitherto, as appears from the foregoing table, there has not been the full complement of children of this class, nor are they likely to present themselves in larger numbers, as the other National Schools established in Galway are, with the exception, perhaps, of the Male School, conducted with all due efficiency, and afford them sufficient opportunities of procuring the elementary instruction they require. Besides, many parents of the humbler class, who were anxious to have their children taught in the Model School, and were willing to pay the weekly penny for them, were not able to keep them well-clad enough to appear among and mix with the children of the higher grades frequenting the school, and withdrew them in consequence after a short time. The school has thus become, to a great extent, a select school, attended chiefly by children of the middle class, who receive in it a better education, and at a much cheaper rate, than in the private schools to which they were previously sent, and which, as a natural consequence, have been very materially injured—some, indeed, wholly closed. Were there room for more admissions of this class, there would be no difficulty in filling up the places, as there is great anxiety among the more respectable parents to avail themselves of the opportunity now offered to them; and even among the penny-a-week children there are many for whom a higher rate would be willingly paid, rather than forego the benefits of this School, were the present minimum rate to be discontinued.

Occupation of Parents.—The foregoing observations regard-

ing the class of children attending the School, will be confirmed by a glance at the table (Appendix A 2,) in which is given the number of children belonging to the different trades or professions, and of which I subjoin a summary.

Galway.

5	were	Orphans.
34	were children of	Labourers and Servants.
12	,,	Farmers, &c.
78	,,	Mechanics.
88	,,	Shopkeepers.
54	,,	Clerks and Petty Public Officers.
38	,,	Clergymen, professional men, merchants.
10	,,	Private persons, not in business.

Religious Denominations and Religious Instruction.—The following is a statement of the number of children on the rolls at the end of last February, belonging to the several undermentioned religious denominations:—

	Boys.	Girls.	Infants.	Total.
Roman Catholics, . .	154	76	54	284
Established Church, .	14	8	6	28
Presbyterians, . . .	4	–	3	7

The times and other arrangements for the separate religious instruction of these children, were adopted, after consultation with their respective clergymen, whose wishes and convenience it was at first necessary to meet, and who have since expressed themselves satisfied with the manner in which the regulations have been carried out. One hour, from 2 till 3, on Fridays, and half-an-hour, from 2½ till 3, on the four previous days of the week, are devoted to the religious instruction of the children of the several departments.

At these times the Protestant boys assemble in the Pupil-Teachers' study-room, under the charge of the Protestant Pupil-Teachers, while the Protestant girls and infants are taken into the religious instruction room, under the Protestant Mistress and Monitress. One of the Vicars of Galway is very frequently present for the religious instruction on Fridays, and sometimes on the other days. A Presbyterian clergyman has also come occasionally to give religious instruction at the appointed hours.

The Catholic children remain in their respective schoolrooms, where they are instructed by the Teachers, Pupil-Teachers, and Monitresses of their own church, under the superintendence and direction of the nuns of the Order of Mercy, four of whom attend every day at the specified time; and the zeal and earnestness of these ladies, the interest they have taken in the children, have, more than any other circumstance, tended to secure the confidence of the Catholic parents, without which I need not say that in Galway an institution of this kind would have utterly failed.

Literary Instruction.—In Appendix B will be found the time-tables of the different departments, with a statement of the various subjects taught to the classes from the first opening to the end of February. The nature and extent of the instruction proposed to be given, the order of the exercises,

the time allowed for each, will be seen on a perusal of these documents. The aim, in schools of this character, should be to teach well what it is right to teach—to give a correct and sound knowledge of those elementary branches which form the groundwork of instruction for all grades in society—to avoid creating among the children an unhealthy and unnatural mental excitement, by the multiplicity and variety of the subjects brought under their notice—to guard most carefully against introducing into the course matters foreign to the requirements of an elementary School for the poorer classes, or studies that cannot be usefully prosecuted unless under peculiar local circumstances which to-day exist, and to-morrow may have passed away. If these schools, built from funds voted for the education of the poor, and intrusted, for the promotion of this object, to the Commissioners of National Education, are to be deserving of their title of Model National Schools, it is only by becoming *working models*, so to speak, for the elementary schools, so far, at least, as the kind and amount of instruction are concerned. This end will evidently be frustrated, if, in our anxiety to produce striking results, or to make some wondrous display, we draw the pupils off in the slightest degree from those studies which legitimately pertain to their age and position, to others belonging to children of a different age and a different rank; or if, for the purpose of gaining some passing popularity, we allow it to go abroad that the instruction given in these institutions is—not that usual in *ordinary schools*, but—such as befits *colleges* or *academies*.

Boys' School.—When I examined the boys in March last, I found that great attention had been paid to the *reading*, especially in the junior divisions. There were 24 out of 36 boys in the lower section of the Second Class, who could read with ease and correctness the lessons they had learned; and out of 13 children who formed the section next below this, namely, the higher section of the First Class, all but one could read in a satisfactory way any of the lessons in the first, or lowest, lesson-book. In the senior division, out of 37 boys examined, (4 in Fourth Book, and 33 in Third), 19 read with fluency and some degree of intelligence, and only two appeared to me very deficient. The results of the examination in the other sections, containing 53 boys, were equally satisfactory.

In *spelling*, the proficiency was not so good, and the progress made by the children, though fair under the circumstances, was not so marked. Those, however, who have been practised in *dictation*, acquitted themselves very respectably in the exercise I gave them—10 out of 20 of the papers being written without any gross error in orthography, and 4 only being very bad.

The *writing*, in 43 copy books belonging to the advanced boys, which I examined, was very fair in all respects, the execution and style in 13 cases being highly commendable. In 90 copy books belonging to the junior divisions of the

School, the specimens of penmanship were tolerably good in 43 cases, and bad in 47.

Those whom I examined in *arithmetic* answered satisfactorily, particularly in notation and the simple rules, with the principles of which they seemed to have been made well acquainted, and they worked upon their slates with readiness the questions given them.

Girls' School.—I examined 17 girls of the Fourth Class, and 20 of the Third, and I considered the *reading* of 21 good, and of 13 fair,—fluent, but not sufficiently intelligent. I heard 20 other girls belonging to the junior division read, but was not equally pleased, as not more than one-half could read with any degree of ease or correctness the lessons in the Second Book. I also found the classes generally deficient in a knowledge of the subject-matter of the lessons.

The Fourth Class girls acquitted themselves very well in *spelling,* answered fairly on those portions of the Spelling Book Superseded they had been taught, and wrote with tolerable correctness the exercises in *dictation* I gave them from the lesson book. In the other sections the spelling was not satisfactory.

The *writing* of the advanced girls is, in general, good, free, and distinct: that of the younger children is as yet but indifferent, although there is a marked improvement in their later copies. The copy books are all clean and neatly kept.

In teaching *arithmetic,* the Mistress has taken much pains to explain the several processes gone through, to make the girls know the definitions of the several terms used, and understand the nature and the reasons of the operations they have to perform.

Little progress has been made in *grammar,* few of the girls being able to distinguish and class readily the different parts of speech that occur in a sentence. In *geography,* the maps of the World, Europe, and Ireland, have been taught to most of the children, and the senior girls have besides received some lessons on the form, motions, and magnitude of the earth, and on the nature and use of the circles of latitude and longitude.

Needlework, to which, until the singing lessons commenced in January, an hour a-day was devoted, has been carefully attended to by the Mistress; and, while the young children are instructed in the various kinds of sewing, hemming, knitting, &c., the more grown girls are chiefly employed in the finer descriptions of work, and in making up for home little fancy articles.

Infants' School.—The Teachers in this department have been most successful in introducing the Infant School System, and they have trained and drilled the young ones after the most approved fashion. Nothing is more delightful than to see their happy, cheerful countenances, while in the school-room, as well as in the play-ground; to observe the earnestness with which they stamp the floor in their marches, to hear their merry voices, to witness the eagerness with which they listen

to the stories told in connexion with the lessons, and the readiness with which they put up their hands, when about to be called upon to answer a question. All the strangers who visit the establishment seem peculiarly gratified with what they hear and see in this department, and with the life and heartiness with which the children go through their various exercises.

The collective lessons in the gallery are given with much care, and an equal amount of attention is paid to the instruction of the children in their several drafts. The 45 children present on the day I examined this school answered remarkably well on the several subjects they had been taught.

Discipline and Order.—The discipline maintained in all the departments of this institution is excellent; every attention is given to ensure neatness and cleanliness, and the order observed both in the school-room and in the play-ground is deserving of the highest commendation. The best evidence of the zeal and judgment with which the Teachers have applied themselves to this portion of their duties, is to be found in the great improvement that has taken place in the manners and habits of the pupils.

Pupil-Teachers.—At the opening of the Schools, four resident Pupil-Teachers were appointed—three Roman Catholics and one Protestant—all pupils of National Schools. As the applications for admission to the Boys' School soon became very numerous and pressing, it was found necessary to appoint additional Pupil-Teachers, before the end of the first half-year, in order that the teaching of the several classes might be conducted with the proper degree of efficiency. These young men have behaved with the utmost propriety, submitting themselves readily and cheerfully to all the rules of the establishment, discharging honestly the duties imposed upon them, attending diligently to their respective classes during school hours, and to their own improvement during the study time. At the examination of the Teachers of the district, held in Galway, in December, I examined the four senior Pupil-Teachers, and was satisfied from their respectable answering on the several subjects, that they had made due proficiency in their studies. A similar statement has been made by the District Inspector, who, at his weekly visits, takes occasion to examine them, and witness their mode of managing the classes intrusted to their care.

In Appendix C is a statement of the subjects they have hitherto studied.

Paid Monitresses.—The difference between the Pupil-Teachers, who assist the Master, and the Paid Monitresses, who act as assistants to the Mistress, is, that the latter are generally much younger, and residing with their parents; are not, therefore, under the superintendence of their Teacher, except during school time.

When the numbers in attendance in the Girls' and Infants' Schools had increased sufficiently to warrant the Commissioners in appointing Monitresses, four young persons were

selected after examination, and recommended for the situation. One of these was a Paid-Monitress in the Claddagh Female National School, one a pupil of the Model School, one a pupil of the Rahoon Female National School, and the fourth a pupil of the Parochial School in Galway. The three former are Roman Catholics; the last, a Protestant.

These young girls, besides being employed in teaching, arranging, and superintending the classes in the school, have certain subjects appointed for them to study, on which they receive instruction from the Mistresses, and are from time to time examined by the Inspector. Each of the three Mistresses has a certain number of the subjects assigned to her, and she instructs and examines upon them for one hour after school, on two days of the week. This time is very limited, and affords but small facilities for effecting any marked improvement in the attainments of such young persons; yet, on the whole, the progress made by the Monitresses is of a satisfactory character, as regards both acquirements and method of teaching.

Singing.—In January, Mr. Washington, who has been so successful in forming singing classes in the Clonmel and Trim District Model Schools, commenced to teach vocal music, according to Hullah's system, in the several departments of this School. He spends half an hour a day in each, and gives, besides, on alternate days, an hour's lesson to the Pupil-Teachers, and to a class of girls consisting of the Paid-Monitresses and some of the more advanced pupils of the School. The three Mistresses assist at, and take part in these lessons.

I beg to state, before concluding my report, that I have met with the ready and active co-operation, not only of the Inspector and Teachers, but of all the local parties whom it has been my duty to consult, with reference to the regulations and management of this School: and to this circumstance is to be attributed the present prosperous condition of the institution.

I have the honour to be, your obedient Servant,

EDWARD BUTLER.

The Secretaries, Education Office.

APPENDIX A 1.—ATTENDANCE, SCHOOL FEES, &c., from the 28th of July, 1852, to the 28th of February, 1853.

	BOYS.				GIRLS.				INFANTS.				TOTAL.			
	Average No. on the Rolls.	Average No. in daily Attendance.	Proportion of average daily Attendance to 100 on Rolls.	Amount of School Fees received.	Average No. on the Rolls.	Average No. in daily Attendance.	Proportion of average daily Attendance to 100 on Rolls.	Amount of School Fees received.	Average No. on the Rolls.	Average No. in daily Attendance.	Proportion of average daily Attendance to 100 on Rolls.	Amount of School Fees received.	Average No. on the Rolls.	Average No. in daily Attendance.	Proportion of average daily Attendance to 100 on Rolls.	Amount of School Fees received.
				£ s. d.				£ s. d				£ s. d.				£ s. d.
1852, July, (4 school days)	39	38	97·4	3 19 0	28	27	96·4	2 3 8	26	25	96·1	0 11 10	93	90	—	6 14 6
„ August, . .	91	83	91·2	7 19 7	46	40	86·9	3 1 1	51	41	80·4	1 15 9	188	164	—	12 16 5
„ September, .	136	117	88·2	3 7 4	70	61	87·2	2 17 2	65	55	84·6	1 18 6	271	233	—	8 3 0
„ October, . .	150	127	84·7	2 15 11	85	76	89·4	1 7 9	76	58	76·3	0 19 3	311	261	—	5 2 11
„ November, .	173	139	80·4	9 18 5	84	63	75·0	3 16 6	74	56	75·7	2 14 1	331	258	—	16 9 0
„ December, .	171	126	73·7	3 19 2	74	51	68·9	1 15 1	70	44	62·9	1 2 1	315	221	—	6 16 4
1853, January, . .	172	129	75·0	4 13 6	75	54	72·0	6 1 2	65	40	61·6	1 19 10	312	223	—	12 14 6
„ February, .	172	133	77·4	10 6 0	82	64	78·1	3 8 6	66	48	72·7	1 13 5	320	245	—	15 7 11
General Averages and Totals,	147	119	80·9	46 18 11	72	58	79·8	24 10 11	65	48	73·9	12 14 9	284	225	79·0	84 4 7
School Expenses, .	. .	. £6 19 0½	. .		. .	. £2 5 9	. .		. .	. £0 8 2	. .		..	. £9 12 11½		
School Requisites, .	. .	. £14 5 10½	. .		. .	. £4 9 7½	. .		. .	. £0 12 0¼	. .		. .	. £19 7 5¼		

APPENDIX H.
I. Reports on District Model Schools.
Galway.

APPENDIX H.

I. Reports on District Model Schools.

Galway.

APPENDIX A 2.

OCCUPATION of PARENTS, and NUMBER of CHILDREN, belonging to each Trade or Profession.

	Boys.	Girls.	Infants.	Total.
Agent,	2	–	3	5
Apothecary,	3	–	1	4
Architect,	2	–	–	2
Auctioneer,	–	1	1	2
Baker,	1	1	–	2
Barrack-master,	1	–	1	2
Blacksmith,	–	1	–	1
Boatman,	1	–	2	3
Bookseller and Stationer,	2	2	–	4
Boot and Shoe maker,	4	1	–	5
Builder,	4	–	1	5
Cabinetmaker,	2	–	–	2
Carpenter,	6	1	4	11
Car-owner,	1	–	–	1
Clergyman,	1	–	3	4
Clerk,	5	4	2	11
Coachman,	3	2	–	5
Cooper,	1	2	1	4
Corndealer,	1	–	–	1
Court-keeper,	–	–	1	1
Coastguard,	1	–	–	1
Dealer,	2	2	–	4
Deputy Governor of Gaol,	1	–	–	1
Distiller,	2	–	2	4
Draper,	1	–	–	1
Dyer,	–	1	1	2
Engineer,	1	3	1	5
Engine-driver,	2	1	–	3
Excise Officer,	–	1	1	2
Farmer,	9	–	–	9
Gardener,	–	1	2	3
Grocer,	5	1	3	9
Guard of Coach,	–	1	1	2
Hotel and Inn keeper,	3	3	–	6
Hatter,	1	3	1	5
Inspector of weights and measures,	3	–	–	3
Interpreter,	1	–	–	1
Ironmonger,	1	1	–	2
Ironmoulder,	–	–	2	2
Librarian,	1	–	–	1
Labourer,	9	4	4	17
Leather-cutter,	1	–	–	1
Lodging and public-house keeper,	–	–	2	2
Maltster,	1	2	–	3
Mason,	2	2	–	4
Master of Workhouse,	1	–	–	1
Marble-cutter,	3	2	1	6
Matron,	3	1	–	4
Mealmonger,	2	–	–	2
Merchant,	6	10	4	20
Miller,	4	2	4	10
Mill-owner,	2	–	1	3
Millwright,	3	–	–	3
Nailer,	2	–	–	2
Overseer,	4	1	–	5
Painter,	1	–	1	2
Pawnbroker,	6	4	–	10
Pensioner,	2	–	–	2

	Boys.	Girls.	Infants.	Total.
Plumber,	1	–	–	1
Policeman,	2	1	1	4
Porter,	1	–	–	1
Private (not in business),	3	6	1	10
Quit-rent bailiff,	5	–	–	5
Relieving Officer,	–	–	1	1
Revenue Officer,	2	–	–	2
Road contractor,	2	–	–	2
Sawyer,	3	1	1	5
Saddler,	1	–	–	1
Servant,	5	3	–	8
Shopkeeper,	2	4	2	8
Schoolmaster,	1	–	–	1
Smith,	2	–	2	4
Stage-keeper,	–	1	–	1
Stone-cutter,	2	2	–	4
Slater,	–	–	1	1
Teacher of music,	–	2	–	2
Toll-collector,	1	–	1	2
Tobacconist,	1	–	2	3
Turner,	–	1	–	1
Valuator,	3	–	–	3
Victualler,	2	–	–	2
Watchmaker,	2	–	–	2
Watchman,	2	–	–	2
Orphans,	3	2	–	5
	172	84	63	319

Appendix B 1.—Boys' School.

a.—Time Table.

	First Class.	Second Class.	Sequel Class.	Third Class.	Fourth Class.
H. M.					
10 0			Rolls called.		
10 5	Elements of Arithmetic.	Arithmetic.	Repetition in Tables, Spelling, Grammar, and Geography in Gallery. Arithmetic.	Repetition in Arithmetic, Spelling, Grammar, and Geography. Arithmetic.	Repetition in Geometry, Spelling, Grammar, and Geography. Arithmetic or Algebra.
10 35	Repetition in Spelling and Tables.	Repetition in Tables. Spelling, Grammar, and Geography in Gallery. Writing.			
11 5	Reading in Gallery.		Writing.	Writing.	Writing.
11 35	Writing.	Reading Lesson in Gallery.	Maps.	Derivation and Parsing.	Derivation and Parsing.
11 55			General Lesson read.		
12 0			In Play-ground.		
12 30	Maps.	Maps.	Reading in Gallery.	Reading and Explanation.	Reading and Explanation.
1 0			Singing.		
1 30	Reading.	Reading and Explanation in Gallery.	Writing from Dictation.	Writing from Dictation.	Book-keeping or Writing from Dictation.
2 0	Writing Figures.	Elements of Grammar.	Elements of Grammar in Gallery.	Maps.	Maps.
2 30			Religious Instruction.		
3 0			Pupils Dismissed.		

Note.—The business said to begin at two o'clock must be omitted on Fridays, as Religious Instruction then commences; but it is got through from ten till half-past ten o'clock on Saturdays. The remaining school time of Saturdays (till 12 o'clock) is devoted to Repetitions, Mental Arithmetic, and to Writing exercises.

b.—SUBJECTS TAUGHT.

First Class (*lower division*).—First Lesson Book, to page 16 ; Multiplication, to 5 times ; can write a little and make figures.

First Class (*higher division*).—First Lesson Book, Multiplication Table, notation and numeration as far as 5 places of figures, addition, definitions of the simple terms in geography, an outline of the Map of the World, and can write large hand on slates.

Second Class (*lower division*).—Second Lesson Book, to page 84 ; arithmetic to simple addition, inclusive ; geography, the Maps of the World and Europe ; grammar, the article and noun ; can write large hand on paper.

Second Class (*higher division*).—Second Lesson Book ; arithmetic, to simple multiplication, inclusive ; geography, the Maps of the World, Europe, and Africa ; grammar, the article, noun, and adjective. Spelling-Book Superseded, to page 45 ; can write large hand and round hand.

Sequel Class.—Sequel to Second Lesson Book ; arithmetic, to compound rules and reduction, inclusive ; geography, the Maps of the World and of the four Continents ; the text of Dr. Sullivan's Grammar, to Syntax and simple parsing ; Spelling-Book, to page 54 ; can write round hand and small hand.

Third Class (*lower division*, lately advanced from Sequel).—Third Lesson Book, to page 47 ; arithmetic, compound rules and reduction, and a few exercises in proportion ; geography, Maps of the World and of the Continents, and a little of the United States ; the text of Dr. Sullivan's Grammar to the middle of Syntax, Etymological and a little of Syntactical parsing ; Spelling-Book Superseded, to page 50 ; can write round and small hand.

Third Class (*higher division*).—Third Lesson Book, to page 230 ; arithmetic, to proportion and fractions, inclusive, and elements of mental arithmetic ; geography, Maps of the World, the four Continents and Ireland, and 4 chapters of mathematical ; the text of Dr. Sullivan's Grammar, to 13th rule of Syntax, and Syntactical parsing ; Spelling-Book, to page 86, and rules of spelling ; can write from dictation any passage in the Lesson Book, as far as the class has gone.

Fourth Class.—Fourth Lesson Book, to page 138 ; arithmetic, to practice, inclusive, mental arithmetic ; geometry, first book ; book-keeping, four sets ; geography, Maps of the World, four Continents, Ireland, and England, and eight chapters of mathematical geography ; Dr. Sullivan's Grammar, to page 148, and Syntactical parsing ; prefixes, affixes, and a little of derivation ; spelling of the several classes of words as given in Spelling Book, and rules of spelling, and write from dictation.

APPENDIX B 2.—GIRLS' SCHOOL.

a.—TIME TABLE.

H. M.	First Class.	Second and Sequel Class.	Third Class.	Fourth Class.
10	Reading and Explanation.	Writing.	Arithmetic.	Reading and Explanation.
10 35	Arithmetic.	Reading and Explanation.	Reading and Explanation.	Writing.
11 5	Grammar or Geography on alternate days.	Grammar or Geography on alternate days.	Grammar or Geography on alternate days.	Grammar or Geography on alternate days.
11 35	Writing.	Arithmetic.	Reading.	Reading.
12 5	Spelling or Tables on alternate days.	Spelling or Tables on alternate days.	Writing.	Arithmetic.
12 25	General Lesson.			
12 30	In Play Ground.			
1	Reading.	Reading.	Spelling or Mental Arithmetic.	Spelling or Mental Arithmetic.
1 30	Singing.			
2	Needlework.			
2 30	Religious Instruction.			
3	Dismissal.			

On Fridays, Religious Instruction commences at 2 o'clock.
On Saturdays, the School closes at 12 o'clock.

b.—SUBJECTS TAUGHT.

First Class.—Can read First Book through. Grammar: Parts of Speech. Geography: Map of the World. Arithmetic: Numeration and Addition.

Second Class—(2nd division).—Reading Second Book as far as page 100. Grammar: learning the Parts of Speech. Geography: Maps of the World and Europe; commencing to learn

the Map of Ireland. Arithmetic: Simple Addition; Multiplication Table.

Second Class (Sequel).—Read Sequel as far as page 169, and Second Book through. Grammar: the Parts of Speech. Geography: Maps of the World, Europe, Ireland, and Asia. Spelling: finishing part first of Spelling-Book. Arithmetic: Simple multiplication. Writing: Writing small round hand, angular hand.

Third Class.—Reading: read Third Book through. Grammar: know the Parts of Speech; commencing to apply the rules of Syntax. Geography: Maps of the World, Europe, Ireland, and Asia. Arithmetic: Compound Division; part in Simple Rules. Spelling: know first part of Spelling Book Superseded; are learning the rules of Orthography. Writing angular hand.

Fourth Class.—Reading: read Fourth Book through. Grammar: all know the Parts of Speech; part can apply the rules of Syntax. Geography; Maps of the World, Europe, Asia, America, Africa, England, and Ireland; Mathematical Geography, as far as page 18. Arithmetic: Simple Proportion; Practice; part learning Reduction. Spelling: know the rules for spelling, and can apply them. Writing angular hand.

Appendix B 3.—Infants' School.

a.—Time Table.

Hours.			Employment of Time.
From 10	to	10·5	Call rolls.
,, 10·5	,,	10½	First class, tables on gallery. Second class. Arithmetic in classes.
,, 10½	,,	11	First class. Lessons. Second class, writing figures in desks.
,, 11	,,	11¾	First class, writing. Second class, Lessons.
,, 11¾	,,	12¼	In the Play-ground.
,, 12¼	,,	12¾	First class, Lessons. Second class, Writing.
,, 12¾	,,	1¼	Luncheon.
,, 1¼	,,	1¾	In the Play-ground.
,, 1¾	,,	2	Marching.
,, 2	,,	2½	Geography, or Picture Lesson.
,, 2½	,,	3	Religious Instruction.

On Fridays, Religious Instruction begins at 2.
On Saturdays, School closes at 12 o'clock.

b.—Classification of Children.

First Division.—Learning the alphabet.

Second Division.—Spelling and reading cards up to No. 8; making letters on slates.

Third Division (*lower section*).—Spelling and reading cards up to No. 20, Lesson 17, writing short words on slates.

Third Division (*higher section*).—Spelling and reading card No. 30, Lesson 27, writing long words on slates.

Fourth Division (*lower section*).—Reading in Second Book, to page 25, pointing out the Parts of Speech, commencing Addition, writing round hand on slates.

Fourth Division (*higher section*).—Reading in Second Book,

Appendix H. I. Reports on District Model Schools. *Galway.*

to page 51; elements of grammar; addition; Spelling Book Superseded, page 22; some writing large hand on paper.

All learning descriptive geography; all learning the tables up to five times, also the addition, farthing, pence and shilling tables.

Appendix B 4.

Classification of the Children on the Roll, on the 28th February, 1853.

	Boys.	Girls.	Infants.	Totals.
First Lesson Book,	25	4	49	78
Second do.	69	20	14	103
Sequel to do.	31	14	–	45
Third do.	36	21	–	57
Fourth do.	11	25	–	36
Elements of Grammar,	100	64	16	170
Parsing and Syntax,	47	20	–	67
Descriptive Geography,	100	84	63	247
Mathematical Geography,	47	25	–	72
Arithmetical Tables,	94	–	63	157
Simple Rules,	69	47	16	132
Compound Rules,	31	32	–	63
Proportion and above,	47	5	–	52
Mental Arithmetic,	78	–	–	78
Geometry,	11	–	–	11
Book-keeping,	11	–	–	11
Writing on Slates,	25	6	58	89
Do. on Paper,	100	78	5	183
Do. from Dictation,	47	40	–	87
Singing,	172	84	63	319
Sewing,	–	61	–	61
Knitting,	–	18	–	18
Fancy work,	–	5	–	5

Appendix C.

Subjects studied by Pupil-Teachers.

Lesson Books—The whole series (Sequel No. 1 excepted), to page 198 of the Fourth Book.

Arithmetic—Board's Treatise, to the end of simple interest.

English Grammar—Dr. Sullivan's.

Geography—First fourteen chapters of Geography Generalized; and the maps of the World, of the Continents, and of Ireland.

Spelling-Book—To the end of "Rules for Spelling."

Geometry—Three books.

Algebra—To page 76 in Thomson's (division by detached co-efficients and chapter III. excepted)

Mensuration—Mensuration of plane superficies.

Lessons on Reasoning—The first six lessons.

Book-keeping—Five sets.

The above are the subjects on which the senior Pupil-Teachers are prepared for examination. The juniors are only partially prepared on Arithmetic, Grammar, Geography, and Spelling-Book.

No. 9.—REPORT upon the TRIM DISTRICT MODEL SCHOOL, by EDWARD BUTLER, Esq., A.M., T.C.D., Head Inspector of National Schools.

June, 1853.

GENTLEMEN,—I beg to forward my Report upon the attendance, &c., in the Trim District Model School, for the year ending the 31st of December last; and a joint Report from Mr. Newell and myself, upon the public examination of the children, held two months previously.

Attendance.—The average number on the rolls of the several departments, throughout the year 1852, was 317, and the average daily attendance during the same period, 225, giving a proportion of 71 children in attendance for 100 on the rolls. There were 450 names entered in the registers, of which 157 were the names of new pupils, who had not previously attended the School, showing that two-thirds of the admissions in the year were of children who had been in the institution before, but had been struck off the books. The number of names so removed in 1852 was 463, and 281 were remaining on the rolls at the end of the year.

The following is a comparative statement of the average attendance:—

	For the last eight months of			For the first four months of		
	1850.	1851.	1852.	1851.	1852.	1853.
Boys,	92	84	77	62	85	81
Girls,	108	90	89	69	80	69
Infants,	54	62	65	30	49	33
Total,	254	236	231	161	214	183

From which it appears that the attendance for the periods ending with December, 1850, 1851, 1852, has decreased in the Boys' School, and increased in the Infants', while in the Girls' School it has remained stationary for the two latter periods, but less than it was in the first. The general decrease, however, between the corresponding periods of 1851 and 1852 is much less than between 1850 and 1851.

The small attendance during the four months ending with April, 1853, as compared with that of 1852, is, no doubt, attributable to the great and continued severity of the past winter, which prevented the girls, and particularly the infants, from going to the school. The season, as it is natural to expect, did not affect, to the same extent, the boys' attendance.

The subjoined table gives a more detailed account, made up for the 12 months ending with April in each of the years

APPENDIX II.

I. Reports on District Model Schools.

Trim.

mentioned; and in Appendix A 1 will be found a return of the particulars for each month of the year 1852.

	Average number on rolls for 12 months ending April			Average daily attendance for 12 months ending April			Proportion of average daily attendance to 100 on rolls		
	1851.	1852.	1853.	1851.	1852.	1853.	1851.	1852.	1853.
Boys, . .	123·4	130·3	115·5	82·6	84·4	78·1	66·9	64·5	67·5
Girls, . .	134·3	117·5	118·9	95·3	86·5	83·0	71·2	73·8	69·9
Infants, .	69·3	81·3	75·6	44·8	58·7	54·7	65·5	72·1	71·1
Total, .	327·0	329·1	310·0	222·7	229·6	215·8	68·3	69·5	69·6

School Fees received during 12 months ending April

	1851.	1852.	1853.
	£ s. d.	£ s. d.	£ s. d.
Boys, . . .	29 11 4	30 16 5	23 14 0
Girls, . . .	38 12 11	23 11 7	23 0 6
Infants, . .	14 3 4	12 4 5	11 4 5
Total, . .	82 7 7	66 12 5	57 18 11

School-fees.—Of the children on the rolls on the 31st December, 1852, were entered—

	Boys.	Girls.	Infants.	Total.
At 5*s.* per quarter, .	2	1	–	3
At 2*s.* 6*d.* per quarter,	26	20	5	51
At 1*d.* per week, .	64	71	39	174
As gratuitous, . .	18	25	10	53
	110	117	54	281

The proportion of children at the higher rates is much smaller in this School than was originally contemplated in the Commissioners' Regulations for the management of District Model Schools, and the amount of fees received comparatively less. The payments made by the children during the 12 months ending with April last, came to £57 18*s.* 11*d.*, whereas according to the intended scale, the numbers in average attendance should have yielded upwards of £70. There is not, I believe, any reluctance on the part of the parents to pay for their children the required rates; but the population of Trim is very small—only 1,905 in 1851—and there is little business doing in the town. Some children, however, who are now entered at the lowest rate, could possibly afford to pay a higher one, as the grounds upon which they were first admitted at 1*d.* per week no longer subsist; their elder brothers or sisters, as the case may be, for whom the fee of 5*s.* or 2*s.* 6*d.* a quarter was paid, having been finally removed from the School. To meet such cases, and also of persons whose pecuniary cir-

cumstances may have so far improved as to enable them to give a higher fee—one commensurate with their increased means—for the education of their children, there should be, at stated times, a revision of the rates charged to the several families.

Trade or Occupation.—The avocations of the parents are given in Appendix A 2, with the number of children belonging to each trade or profession. There appear to have been in the School at the end of the year—

100	children of	labourers.
14	,,	servants.
48	,,	farmers and gardeners.
60	,,	mechanics and tradesmen.
41	,,	shopkeepers and persons in business.
18	,,	public officers.

The great preponderance of children of the humbler grades in this School distinguishes it from the other institutions of the same class, and renders it perhaps a more fitting pattern for the ordinary National School, and a better training establishment for young men destined to have the charge of elementary schools in rural districts.

Age of the Children.—The average age of the boys is 11, and of the girls 12, and 68 per cent. of the former, and 56 per cent. of the latter, will be found under 13 years of age.

Boys.	Girls.		
– and	1 were	7 years	old.
15	9	8 ,,	
17	8	9 ,,	
16	14	10 ,,	
12	16	11 ,,	
15	18	12 ,,	
17	20	13 ,,	

Boys.	Girls.		
6 and	12 were	14 years	old.
4	11	15 ,,	
3	4	16 ,,	
3	2	17 ,,	
2	1	18 ,,	
–	1	19 ,,	

There were in the Infants' School—

7	children of	3 years.		12	children of	6 years.	
17	,,	4	,,	5	,,	7	,,
15	,,	5	,,				

The more advanced of the infants were removed, immediately after the public examination, to the Boys' and Girls' Schools: 31 were thus transferred in the course of the year.

Religious Denominations.—Religious Instruction.—The arrangements for the religious instruction of the children have not been altered, as they have proved in every way satisfactory to the parents of the children and to their respective clergymen, who have watched over this branch of the children's education with the most unremitting attention.

Of the pupils in attendance at the end of December, 10 boys, 7 girls, and 4 infants, were members of the Established Church; 100 boys, 110 girls, and 50 infants were Roman Catholics.

The Head-Master, the Mistress, and Assistant-Mistress of the Girls' School, 6 Pupil-Teachers, and 3 Paid-Monitresses,

are Roman Catholics; the Mistress of the Infants' School, 2 Pupil-Teachers, and 1 Paid-Monitress, are members of the Established Church. They all take part in the religious instruction of the pupils belonging to their respective denominations, under the directions of the different clergymen.

Expenses and Salaries.—The staff of Teachers remains the same, as described in Mr. Newell's Report of last year upon this school: their salaries and allowances also, which, together with the sums paid for the maintenance of the Pupil-Teachers, amounted to £366 14*s.* 6*d.* The general expenditure of the establishment, including repairs, fuel, light, and petty school expenses, came to £106 12*s.* 9*d.*, and the proportion of the school-fees paid over to the Commissioners was £26 8*s.* 7*d.* So that the sum of £446 18*s.* 8*d.* was expended on this School in the year 1852, exclusive of the books and requisites supplied at reduced rates, and of the salary paid to the Teacher of Singing during his stay in the establishment.

Pupil-Teachers.—The general conduct of these young men has been most praiseworthy; and they have given every satisfaction to the Head Master, by their zeal and care in teaching their several classes, and by their application to study and their docility out of school-hours.

From a return inserted in Appendix B, it will be seen that out of 16 Pupil-Teachers who entered and left the institution between the opening of the School and the 31st December, 1852, 12 obtained employment as Teachers; and I am happy to have to state, that the reports received regarding them are of a most favourable character. Of the 3 whose course of training has been since completed, 2 have been appointed to National Schools; the other, James Greene, a very promising young lad, died, a short time ago, in the Trim Infirmary, of acute disease of the lungs.

In the same Appendix are given the Pupil-Teachers' time table, their dietary and course of study, with some observations from the Head Master on the mode adopted in instructing them.

Paid Monitresses.—Of the four Paid-Monitresses named in the Report for 1851, only one, Eliza Connell, remains at present in the School, the other three having been appointed Teachers in National Schools. The vacancies were supplied from the School after examination of the pupils who offered themselves as candidates; and the anxiety manifested by some of the girls to obtain, or to fit themselves for, these situations, was so great, that several who knew they had no reasonable claim, requested to be allowed to stand the examination. A class of Candidate-Monitors has since been formed, who act occasionally in the place of the regular Paid-Monitresses, and share with them in the special instructions given them by the Teachers, each of whom remains for the purpose, on two days of the week, after the close of the general school business. It is from among these candidates that the future Monitresses will be selected.

The subjects taught by each Mistress are specified in Appendix C; and having examined the Paid-Monitresses on those portions of the course they have studied, I have to state that their answering was very creditable, especially in arithmetic, geography, and the Lesson Books.

Besides the three Paid-Monitresses already alluded to, three of the pupils of the School have become National Teachers, and they have all discharged their duties with so much steadiness and zeal, that Managers cannot fail to appreciate the advantages conferred by even a short training in this School, and will, no doubt, eventually give the preference to young persons so prepared for their office.

Teachers.—It is quite needless I should mention any thing in praise of the Teachers of this establishment; for if they had in any way neglected their business, or performed it merely in a perfunctory manner, a very different account would have been given of the condition of the Schools from that which is set forth here, and in the following Report upon the public examination. It will be sufficient to state, that they have attended to their several duties honestly, faithfully, and conscientiously.

Remarks.—Before presenting to the Commissioners the Report upon the public examination, in which is embodied a full statement of the progress and proficiency of the pupils, I beg respectfully to submit, for their consideration, the following remarks, bearing upon the general working of the Model Schools, both as training institutions and as Schools:—

1. Considering the difficulty there is in obtaining properly prepared candidates for the Pupil-Teacherships, or persons of sufficient age to be intrusted, at the expiration of one year, with the conduct of a School, it would seem desirable to extend the course of training, and permit the young men to remain in the establishment for a period of two years.

2. As most of those selected are necessarily from the humbler ranks, and their parents may often find great difficulty in providing them, in the first instance, with the requisite outfit, and subsequently keeping their dress in good repair, it is worthy of consideration whether the Commissioners may not, with great propriety and advantage, award some small annual allowance towards these objects.

3. A pair of large sized globes should be supplied to every Model School, and also the necessary apparatus for teaching linear drawing and mapping to the more advanced boys.

4. The Infant School should be provided, with as little delay as possible, with a set of objects, without which the lessons given to the children lose much of their practical character.

5. In each Model School there should be a small chemical apparatus, models of the mechanical powers, a few philosophical instruments, a small collection of the most useful raw materials, with the articles manufactured from them. The

Teacher would thereby be enabled to communicate to his pupils much useful information, which is now kept from them. But in making this suggestion, I wish to guard myself against being understood as recommending or countenancing for any Model School a set course of lectures on chemistry, natural philosophy, geology, &c., by which few, very few, of the children attending these schools can ever be permanently benefited. The Model Schools are not for a class of children altogether different from those frequenting the National Schools, the ordinary schools for the education of the poor in Ireland, and which are emphatically the concern of the Commissioners; and, therefore, it would seem most unadvisable to have professors lecturing from Model School to Model School on subjects beyond the apprehension of the ordinary class of pupils, and which, to be usefully studied and mastered in a practical way, would require more matured intellects than they possess, and closer and more constant application than they can bestow without detriment to their legitimate studies. Whatever instruction it may be right to give on these matters, the Teachers are the proper persons to impart it; they are competent to the task, and if provided with the necessary simple and elementary apparatus, they will perform it at the fitting time and in the fitting place. Let us not forget that 11 is the average age of the boys attending Model Schools—that barely one-tenth of the whole number has attained their fifteenth year—that there are already many most important elementary branches to be attended to—intelligent reading, good penmanship, correct orthography, decent style, accuracy and despatch in arithmetical calculations, to say nothing of grammar, geography, book-keeping, mensuration, music, and drawing. If now we seek to widen the course still further, and endeavour to embrace other subjects (of a subordinate character so far forth as regards our schools), there will be no thoroughness in any single department, the children will feel bewildered by the multiplicity of things presented to their minds, and our schools will ultimately deserve to be ranked in the same category as some of those in America, of which a distinguished writer and profound thinker has said:—"Normal Schools are established for teachers, with what success may be gathered from the fact, that there are not wanting among them persons who do not know how to spell. . . . The chief aim of those who have the care of youth seems to be to erect palaces for school-houses, to multiply books and ornamental branches of study. Solidity is so generally sacrificed to show, that our school system reminds one of a thing which should be the head of a man, but which turns out to be an empty head, that is worthless except as a hairdresser's sign."* I should have felt great hesitation in making these observations in reference to the introduction into our schools of subjects not naturally pertaining to elementary education,

* Brownson's Quarterly Review, January, 1853.

did I not believe that my views accord with the practice of the Central Model Schools, which are under the eye of the Commissioners, and where all incidental scientific instruction that it is desirable to impart to the pupils is given to them by their several teachers, and not by professors or lecturers.

I have the honour to be, your obedient servant,

Edward Butler.

The Secretaries, Education Office.

Report upon the Public Examination of the Children attending the Trim District Model School.

January, 1853.

Gentlemen,—We beg to submit to you, for the information of the Commissioners of Education, our joint report of the public examination of the Trim District Model School, for the year 1852.

When held.—We were obliged to postpone the examination to the 28th October, one of us having been wholly engaged on the business of the Board in other parts of Ireland, during the summer and autumn months. The only inconvenience arising from the postponement was, that but a few of the neighbouring gentry attended, owing to the lateness of the season, and the unfavourable state of the weather. The childrens' parents, however, assembled in larger numbers than at the former examination, and appeared to take a deep interest in the proceedings. Of the clergymen of the different denominations there were in attendance the Very Rev. R. Butler, Dean of Clonmacnoise; the Very Rev. John O'Connell; Very Rev. Tighe Gregory; Rev. J. Sherlock and others.

Preliminary Examination for awarding Premiums.—Previous to the day of the public examination, we devoted six days to a searching examination of the several classes, to test the individual merits of the pupils, in order to be able to select those entitled to premiums, and to arrive at a just conclusion as to the results of the respective Teachers' labours during the past fourteen months. It would not be possible to obtain such information from one day's public examination, which must be considered as an annual event affording rather an approximation to the condition of the establishment, than any real criterion or standard of its worth as a public institution. The extent to which each class was prepared was stated on returns had from the Teachers, and upon these returns we based our examination. The usual amount of £10, granted yearly for premiums to each of the Commissioners' Model Schools, we exceeded by 14s., not hav-

ing made allowance in our first calculation for the additional premiums in music. In the course of our private examination, we selected the pupils most deserving of premiums. The names of the successful ones were announced publicly, and to each was delivered a printed certificate, having the seal of the Commissioners and our names attached.

There were ten premiums awarded in music, four in the Boys', and six in the Girls' School. There were, besides, two given for singing in the Infants' School. In needlework seven premiums were given; four for plain work, two for lacework and embroidery on muslin, and one for embroidery in Berlin.

This year we gave two good conduct premiums in the Girls' School, and two in the Boys'; one of the latter, however, being only *honorary*, as the funds did not enable us to give money in both cases. The pupils for these premiums were selected in the same way as described in our last report, and the amount was in each instance five shillings. Three of the four pupils were remarkable for their good answering generally.

Our returns show that 92 pupils received premiums, the number examined being within a few of 300, which proves that even in a uniform system of education, in which every child is required to partake of instruction in the various branches taught, the clever and industrious pupil can attain to pre-eminence in several branches, as it will be observed that many pupils received *two* and even *three* prizes; while such a system ensures *some* amount of knowledge in all the subjects—a very important consideration to those, who cannot afford to leave their children for any length of time at school.

Mode of conducting public Examination.—We followed the same order in examining the pupils as we observed last year, namely, beginning with the Boys' School, having the Infants' intermediate, and closing with the examination of the Girls'. The infant school-room was the room selected. This year, instead of taking upon ourselves the whole of the oral examination of the boys and girls, we deemed it advisable to require the Head Master, Mr. Freehill, and the Mistress of the Girls' School, Miss Tuite, to examine an advanced class each. Miss Lavender, Mistress of the Infants' School, this year, as last, conducted the examination of the infants, and Mr. Washington, the Teacher of Music, examined the boys and girls separately in singing.

The following programme embraces, in a short space, the particulars of the proceedings, and sets forth the names of the pieces of music sung by the pupils.

BOYS.

Examination on Lesson Books, &c.
Examination on music.

After which the boys and girls will sing the following pieces.

Chorus,	. . .	"The Wheel."
,,	. . .	"The Sabbath Bells."
Solo,	. . .	"The Meeting of the Waters."
Solfeggio.		
Chorus,	. . .	"The Hardy Norseman."

INFANTS.

March, . . . "The Zones."
Song, . . . "Always Gay."
,, . . . "Trades," No. 1.
Examination.
Song, . . . "The Meadows look cheerful."
,, . . . "The Trades," No. 2.
March, . . . "Sister, wake."

GIRLS.

Examination on Lesson Books, &c.
Examination on Music.
After which the boys and girls will sing.
Chorus, . . . "The Harvest Time."
Duet, . . . "What are the wild waves saying."
Song, . . . "The Shamrock."
Chorus, . . . "Dulce Domum."
Distribution of premiums.
National Anthem.

After the National Anthem was sung, the visitors inspected the samples of needlework, which were exhibited in the girls' school-room.

A view of the proficiency of the classes.—We shall now proceed to give a brief statement of our views of the pupils' literary attainments, and their answering in the various subjects.

Reading.—The boys of the senior classes read true and intelligently, though the reading of most wants taste and expression. It is evident from their tone and emphasis, that the pupils have a clear perception of the meanings of the passages they read, while their accentuation fails to please the ear. The girls of these classes read more pleasingly, and equally intelligently. Indeed, in this branch, females of the middle and lower classes of society are generally superior to males. The junior classes of both schools, in the majority of instances, read fairly, but there is an overstraining, as is common to beginners, to watch the punctuation, which deprives their reading of the important character of smoothness.

Spelling and writing from dictation.—The answering in these branches was, upon the whole, satisfactory. The senior classes are well acquainted with the leading principles of Orthography, and spell *viva voce*, or write with a fair degree of accuracy any passage free from technical terms and proper names, a knowledge of which can be had only from experience and extensive reading. They are exercised on alternate days, in writing passages dictated from Lesson Books, or are accustomed to write in their own language, a short history or description of some of the animals, manufactures, or productions treated of in these books. The junior classes spell very correctly.

Grammar.—In the Boys' School, the Third, Fourth, and Fifth Classes, are all acquainted with syntax, and can parse easy sentences creditably. Those of the Fifth can parse difficult sentences in prose well, while some can analyse and arrange in strict grammatical order passages from blank verse. The advanced girls parse well, and have a very clear under-

standing of the relation that the clauses of compound sentences bear to each other. The junior classes of both schools can refer words to the respective parts of speech, with more or less correctness.

Arithmetic.—The boys of Fifth Class were prepared in Thompson's Arithmetic to the end of Simple Interest, Fellowship, and Evolution; and in mental arithmetic so far as it is treated of in the smaller arithmetic. Their acquaintance with the rules, and with the principles upon which these rules depend, proved that they had been carefully taught; while their readiness in most cases in solving questions, evidenced practice and accuracy in arriving at the required results. The boys of the junior classes, know the four fundamental rules, and answer well in notation and numeration. The advanced girls had all studied proportion, practice, and interest, and a few knew vulgar fractions. Their answering was steady and satisfactory. The junior classes knew the simple rules, arithmetical tables, notation and numeration, better than could be expected from their age and attendance.

Geography.—The boys of the fifth class, have read 14 chapters of the Geography Generalized,—a very extensive course, embracing much information on physical and mathematical geography. The girls read only four chapters of this book. These lessons have been explained carefully, and in some cases practically, so that pupils have a fair knowledge of their contents. Local geography is well known in detail by the advanced classes, while the junior are acquainted with the great outlines of land and water—the chief countries in Europe, their capitals, mountains, and rivers; and with the map of Ireland.

To assist the pupils in acquiring a knowledge of this useful branch, blank maps of Europe and Ireland on a small scale have been used from the beginning in both schools; and latterly maps of the same kind, but on the scale and projection of those published by the Commissioners, have been made by the Head Master, and introduced to the Boys' School. These maps give a more permanent character to the pupil's knowledge, as he can no longer depend upon his eye for catching the name, but remembers the country from its relative position or geographical conformation. There is also a small terrestrial globe for the use of each school, by means of which, easy problems on latitude and longitude have been explained.

Writing.—A very great improvement has taken place in this branch in the Boys' School, and the anticipations expressed on this head in our last report, have been realized. The girls in many cases write very neatly and well, but the penmanship of the younger children betrays some evidences of want of care.

Geometry and Algebra.—In the former branch, the boys of fifth class read the first book of Euclid, and the measurement of plain rectilineal figures. In the latter they were prepared for examination in the elementary rules and on simple and Quadratic Equations. Their knowledge of both branches is

as yet very slight, but their proficiency is proportionate to the time that has been spent at these subjects.

Needlework.—This branch is carefully and successfully taught in all its departments, but plain work is particularly attended to. Every girl sews for one hour daily, and materials are occasionally supplied from the school funds, when the pupils fail to supply themselves. Some specimens in lace and embroidery were acknowledged to have been well executed. Such pupils as purpose becoming Teachers, prepare each a work-book for herself, which she may bring away when leaving school. (See Appendix D.)

Singing.—In February last, the Commissioners were pleased to send Mr. George Washington to give instruction in Wilhem's System of Vocal Music. He remained in daily attendance from February till the day of the public examination, with the exception of about one month's interruption, when his services were required elsewhere. Under Mr. Washington the boys and girls made a most satisfactory progress; of the former, not more than 50 per cent. were found to have voices, while fully 95 per cent. of the girls could sing. They have all learned a great number of cheerful and suitable songs, and can answer respectably in both parts of Hullah's Manual. Their singing on the day of examination was very much admired. In Appendix E will be found a series of questions proposed to be answered, in writing, by the advanced girls and Pupil-Teachers. These papers were answered very correctly; and the character of the questions, which were framed according to the capacity of those examined, proves that the knowledge of the elementary principles of music is considerable.

This refining branch of education has been most acceptable to the pupils and their parents. At first, many of both did not understand why singing should be taught, and considered learning it a loss of time. The pupils, however, first began to like it, and next the parents. The former deriving pleasure and instruction from the music and poetry, and the latter finding their evening fire-side cheered by the voices of their children after the toils and labours of the day.

Infant School.—This school continues to have that amount of support to which its importance, as a means to an end, entitles it. It is very numerously attended, and the parents have every reason to be pleased with the manner in which it is conducted. The second and sequel classes spell and read well, answer creditably on maps, and know the three first fundamental rules taught from the Arithmeticon. They can also set down figures to five or six places correctly. They write large letters and words neatly on slates.

The singing in this department is remarkably correct, and what is attempted with success in few infant schools, they sing in parts.

It is not, however, to the amount of instruction that Miss Lavender has especially directed her attention, for, while she

sees that the rudiments of the above branches are carefully taught, she is aware that her pupils' education has its future elsewhere. She has cultivated their nascent dispositions by gentleness and sympathy, and has impressed them with the finer qualities of which their young natures are so susceptible.

A synopsis of the course of teaching will be found in Appendix F.

Moral Culture and Discipline.—Under this head there is much for congratulation, both in the Boys' and Girls' School, but especially in the latter. The orderly appearance of the girls at once strikes a stranger, and their outward appearance and demeanour are, in this case, true exponents of their general conduct. A very marked improvement has been effected, for which great credit is due to Miss Tuite and her assistant, Miss Grace. This improvement has been noticed by several ladies acquainted with the girls before and since the establishment of the school.

In the Boys' School there is not so much to please the eye in the demeanour of pupils, but they are very generally well behaved, and live in harmony with one another. Mr. Freehill had to reduce to order and discipline advanced boys, bred both in town and country, to effect a union of rather heterogenous elements, and he has made them to unite with considerable success.

Concluding Observations.—The information which enabled us to write the few foregoing remarks, also warrants us in drawing a conclusion generally favourable to the establishment. In spite of some opposition, a little prejudice, and much misrepresentation, the schools have succeeded, and are supported by the vast majority of the inhabitants. We now speak of the establishment merely as a local institution, without reference to its more extended influences, which are alluded to in another place, and we do believe that its success has fully realized the hopes of its founders. Much of this success is due, as we have always intimated to the Commissioners, to the valuable support of the Very Rev. R. Butler, Vicar of Trim, and to the Very Rev. John O'Connell and his Curates, who are unremitting in their attention to the religious education of the pupils, and to the interest of the schools generally.

We are, gentlemen, your very obedient servants,

EDWARD BUTLER.
W. H. NEWELL.

The Secretaries, Education Office.

Appendix A 1.

Return of Attendance, &c., for Year ending 31st December, 1852.

	Boys.				Girls.				Infants.				Total.			
	Average No. on the Rolls.	Average daily Attendance.	Proportion of average Attendance to 100 on Rolls.	School Fees.	Average No. on the Rolls.	Average daily Attendance.	Proportion of average Attendance to 100 on Rolls.	School Fees.	Average No. on the Rolls.	Average daily Attendance.	Proportion of average Attendance to 100 on Rolls.	School Fees.	Average No. on the Rolls.	Average daily Attendance.	Proportion of average Attendance to 100 on Rolls.	School Fees.
				£ s. d.				£ s. d.				£ s. d.				£ s. d.
January,	128·6	79·3	61·6	2 2 10	105	69	65·7	2 15 9	62·2	37·7	60·6	0 10 10	295·8	186·0		5 19 5
February,	131·1	99·1	75·5	4 15 9	115	89	78·3	2 2 10	66·2	52·5	73·3	1 11 2	312·3	240·6		8 9 9
March,	136·6	90·6	66·3	2 8 8	121	88	72·7	2 3 5	69·6	54·2	77·8	0 14 8	327·2	232·8		5 6 9
April,	123·1	65·7	53·3	1 7 11	114	71	62·3	1 17 5	73·5	52·7	71·7	0 14 7	310·6	189·4		3 19 11
May,	112·4	82·2	73·1	3 1 4	131	95	72·5	1 18 11	79·7	65·5	82·2	1 9 2	323·1	242·7		6 9 5
June,	126·5	92·3	72·1	1 7 10	135	110	81·3	3 7 0	85·8	70·5	82·2	1 6 11	347·3	262·8		6 1 9
July,	132·8	81·3	61·2	1 12 8	113	94	83·2	1 18 0	92·6	74·2	80·1	0 19 8	338·4	249·5		4 10 4
August,	122·4	64·0	52·3	1 2 0	133	83	62·4	1 7 7	98·3	76·0	77·3	0 9 9	354·7	223·0		2 19 4
September,	104·5	63·0	60·2	3 0 1	128	82	64·1	2 12 1	97·9	76·7	78·3	1 8 7	320·4	221·7		7 0 9
October,	97·1	73·2	75·3	2 0 1	104	90	86·5	2 7 3	93·5	69·1	73·9	1 6 6	294·6	232·3		5 13 10
November,	107·5	74·8	69·5	2 5 9	102	78	76·4	1 10 4	77·9	43·4	55·7	0 18 9	287·4	196·2		4 2 3
December,	114·6	80·9	70·5	0 18 8	120	77	64·2	0 17 10	62·3	39·8	63·9	0 11 9	296·9	197·7		2 8 3
Total,	119·3	78·7	65·9	26 3 7	118·1	86·1	72·9	23 18 5	79·8	59·8	74·9	12 2 4	317·2	224·5	70·7	62 4 4

APPENDIX A 2.

NUMBER of CHILDREN belonging to each Trade or Profession.

	Boys.	Girls.	Infants.	Total.
Baker,	1	2	–	3
Barrack-sergeant,	–	2	–	2
Blacksmith,	1	1	2	4
Builder,	3	–	–	3
Butcher,	2	1	1	4
Butler,	–	1	–	1
Carpenter,	–	4	2	6
Carrier,	2	–	–	2
Civil Bill Officer,	1	–	–	1
Coachman,	–	2	2	4
Cooper,	3	1	–	4
Deputy Governor of Gaol,	2	–	–	2
Farmer,	20	20	–	40
Gardener,	3	3	2	8
Herd,	–	6	1	7
Hotel-keeper,	1	1	1	3
Labourer,	42	42	16	100
Mason,	3	3	3	9
Miller,	6	3	1	10
Nailer,	–	–	1	1
Painter,	2	–	1	3
Pensioner,	–	–	1	1
Policeman,	–	1	1	2
Printer,	1	–	–	1
Road Contractor,	2	–	–	2
Saddler,	3	–	–	3
Shoemaker,	4	5	8	17
Shopkeeper,	6	11	5	22
Tailor,	–	3	3	6
Turnkey,	2	5	3	10

Appendix B 1.

Return of Pupil-Teachers who entered the Trim Model School, from its opening to 31st December, 1852.

No.	Name.	Age at time of entrance.	Religious Denomination.	Parent's Employment.	Where educated.	When appointed.	Date of leaving.	Months spent in Establishment.	Cause of Removal, and Destination.	General Health.
1	Patrick Hughes,	17	R. C.	Herd,	Bohermeen N. S.,	5th May, 1850,	5th May, 1851,	12	Appointed to Batterstown N.S.,	Not ill.
2	Philip Smith,	18	do.	Farmer,	Crowenstown N. S.,	do.,	26th April, 1851,	12	" " Wilkinstown N.S.,	21 days ill.
3	Owen Callaghan,	18	do.	Do.,	Cornaguilta N.S.,	7th Oct., 1850,	30th Sept., 1851,	12	" " Moynalvey N. S.,	Not ill.
4	David Arnold,	18	E. C.	Do.,	Carrigallen N. S.,	do.,	2nd Sept., 1851,	11	Got a situation on Midland Great Western Railway,	6 days ill.
5	Denis Donegan,	18	R. C.	Do.,	Baconstown N. S.,	do.,	30th Sept., 1851,	12	Appointed to Bohermeen N. S.,	Not ill.
6	James Glennon,	19	do.	Do.,	Kilskier N. S.,	do.,	26th Oct., 1850,	12½	Went home,	do.
7	Theo. hilus Smith,	19	E. C.	Turnkey,	Trim Model School,	do.,	1st May, 1852,	19	Appointed to Agher N. S.,	10 days ill.
8	George Gwynne,	18	R. C.	Farmer,	Killegorman N. S.,	do.,	30th Sept., 1851,	12	" " Balrath N. S.,	6 days ill.
9	Francis Dunne,	19	do.	Carrier,	Mullingar N. S.,	2nd Dec., 1850,	16th Feb., 1852,	14½	" " Askeaton N. S.,	Not ill.
10	John Beatty,	19	do.	Labourer,	Oristown N. S.,	5th May, 1851,	14th Aug., 1851,	3	Illness, which he took at home,	
11	Patrick Duffy,	18	do.	Do.,	Wilkinstown N. S.,	do.,	1st May, 1852,	12	Appointed to Phillinstown N. S.,	Not ill.
12	William Gilsen,	18	E. C.	Farmer,	Clonmellon N. S.,	1st Oct., 1851,	3rd Nov., 1852,	13	Accepted a private tuition,	47 days ill.
13	George Blake,	16	R. C.	Caretaker,	Rathfeigh N. S.,	do.,	30th Oct., 1852,	13	Appointed to Millcastle School,	Not ill.
14	Peter Fay,	18	do.	Farmer,	Kilberry N. S.,	do.,	do.,	13	" " Kilberry N. S.,	do.
15	Patrick Connell,	16	do.	Do.,	Carlanstown N. S.,	do.,	7th Oct., 1852,	12	" " Girley N. S.,	do.
16	Michael Timmons,	18	do.	Herd,	Ditto,	do.,	30th Oct., 1852,	13	" " Phillinstown N.S.,	do.
17	James Greene,	19	E. C.	Shoemaker,	Kells N. S.,	1st May, 1852,	—	8	In Model School still,	do.*
18	Joseph Boylan,	20	R. C.	Nailer,	Navan N. S.,	do.,	—	8	do.,	do.
19	John Fitzsimons,	21	do.	Farmer,	Nobber N. S.,	do.,	—	8	do.,	do.
20	Laurence Early,	19	do.	Do.,	Longwood N. S.,	2nd Nov., 1852,	—	2	do.,	do.
21	John Graham,	17	E. C.	Postmaster,	Castletown N. S.,	do.,	—	2	do.,	do.
22	Michael Connell,	19	R. C.	Shopkeeper,	Carlanstown N. S.,	do.,	—	2	do.,	do.
23	Terence Corrigan,	18	do.	Farmer,	Kilskier N. S.,	do.,	—	2	do.,	do.
24	James Divine,	17	do.	Do.,	Killegorman N. S.,	1st Dec., 1852,	—	1	do.,	do.

* Died in April, 1853.

APPENDIX H.

I. Reports on District Model Schools.

Trim.

APPENDIX B 2.

PUPIL-TEACHERS' TIME TABLE.

H. H.

6 to 6¼, Devotional exercises, ablutions, making beds, and dressing.
6¾ to 8, Studying subjects to be taught in school during the day.
8 to 8½, Dusting school-rooms, opening windows, and working the pump.
8½ to 9, Breakfast.
9 to 10, Receiving children in play-ground, and inspecting personal cleanliness. At half-past 9, large bell to be rung, and again at 10 minutes to 10.
10 to 3, Teaching in school-room, according to School Time Table.
3 to 3½, Sweeping school-rooms, and mending pens for the following day.
3½ to 4, Dinner.
4 to 5¾, Walking. During the very short days, to return before dark.
5¾ to 6, Sweeping girls' school-room.
6 to 9, viz.:—

	6 to 6¾.	6¾ to 7½.	7½ to 8¼.	8¼ to 9.
Monday,	Singing, Book-keeping, or Dawes' Hints.	Algebra or Arithmetic.	Mensuration or Geometry.	Natural Philosophy.
Tuesday,	Singing, Writing, or Composition.	Writing or Mensuration.	Spelling Book or Money Matters.	Lessons on Reasoning.
Wednesday,	Singing, Writing, or Parsing.	Writing or Natural History.	Arithmetic or Geometry.	Natural Philosophy.
Thursday,	Singing, Writing, or Reading aloud.	Algebra or Arithmetic.	Geometry.	Lessons on Reasoning.
Friday,	Singing, Writing, or Parsing.	Geography or Natural History.	Spelling Book or Dawes' Hints.	Principles of Pronunciation.
Saturday,	Answering written questions.			

9 to 9¼, Supper.
9¼ to 9½, Cleaning shoes.
9½, Devotional exercises; prepare for bed. At 10, lights extinguished.

The foregoing is followed from 1st October to 1st April; during the remaining part of the year the morning business commences half an hour earlier.

APPENDIX B 3.

PUPIL-TEACHERS' DIETARY, &c.

Breakfast.—1 lb. of bread, and 1 pint of milk or cocoa, alternately.
Dinner.—Sunday, Tuesday, and Thursday, 1 lb. of bread and ¾ lb. of meat (bone included). Monday and Saturday, 1 lb. of bread, and soup. Wednesday and Friday, 1 lb. of bread, and rice, prepared with milk and sugar. Potatoes are given occasionally, instead of brown bread, at dinner.
Supper.—¾ lb. of meal, in stirabout, and 1 pint of milk.

Washing.—Two shirts, two pair of socks, and two neck-ties, weekly. One night-shirt each fortnight. The other bed-linen changed monthly.

APPENDIX B 4.

PUPIL-TEACHERS' COURSE OF STUDY.

This comprises reading (prose and verse), composition, derivation of words, Spelling Book Superseded, Sullivan's Grammar, Geography Generalized, Arithmetic in Theory and Practice, Board's Mensuration (to page 90), two books of Euclid, Algebra (to the end of Simple Equations), three sets of Book-keeping, Lessons on Reasoning (first part), History and Natural Philosophy, as found in Fifth Book, a general knowledge of the Lesson Books, including Easy Lessons on Money Matters and Natural History.

This study is of a two-fold nature. In the morning they are engaged in preparing the lessons which they are to teach during the day in the school-room, and in the evening they are employed in studying those works which have reference to the literary part of their own education. The Head Master superintends both departments, directing their attention to the following points:—

What education is.—The difference between education and instruction—how education should be viewed as regulating the whole conduct of the child—education should proceed by degrees—should be practical and suitable to the circumstances of the child.

Teaching.—Instructions for giving conversational lectures—analysis of lessons—method of taking notes of a lesson—art of questioning—the three kinds of questions—simultaneous answering—plan of arranging classes—how Teacher should stand in the class—prevent prompting, pupils leaning on one another, thrusting hands in pockets, and ensure obedience without severity—on teaching the different branches.

Gallery Lessons.—Advantage of gallery instruction—how it conduces to the formation of orderly habits—economizes labour—the importance of preparing the heads of gallery lesson beforehand—the arrangement of heads should be particularly attended to—order and attention—care that should be taken lest strictness should degenerate into harshness—how attention can be secured—the importance of setting the pupils a thinking—to aim at drawing information from the child rather than giving it—the advantage of using simple language.

Government.—The importance of government as regards both the Teacher and the pupils—how authority may be abused—how it should be used—should be adapted to the nature of the child—principle should be appealed to—difference between punishment, correction, and discipline—the advantage and disadvantage of giving premiums—emulation.

The Pupil-Teachers are also taught after the manner of a class in the School.

Sometimes again questions such as the following are put:—

Reading.—Have you any definite method of teaching reading?—what are the advantages of appointing a certain portion

to be read?—why should not it be very long?—how are you generally able to determine whether a reader understands his piece or not?

Interrogation.—What is your great object in questioning on a lesson?—do you endeavour to draw forth the general meaning of the sentence or passage first?—do you explain any question yourself without putting it round the class?—whether should a question be for a single boy or for the use of the whole class?—do you endeavour to satisfy yourself that every boy in the class understands your question before you are done with it?—would it be advantageous that the Teacher should stand with his back to any of the pupils?—should he be able to see his whole class at a single glance?—should he be constantly on the watch lest some boys would be inattentive?—would there be any advantage in selecting the boy for reading, and not following a succession from first to second, second to third, &c.?

Michael Freehill, Head Master.

Appendix C.—Paid Monitresses' Course.

a.—Subjects of Instruction for Wednesday and Thursday.

Arithmetic, English grammar, English composition; embroidery, knitting, and crochet; lessons on household work; occasional conversations on the necessity of inspiring the pupils committed to their charge with a desire of acquiring knowledge or taste for the practice of virtue.

Rose Tuite,

Principal Teacher of Girls' School.

b.—Subjects of Instruction for Friday and Saturday.

On Friday evenings, from 3 to 4 o'clock, the girls are engaged in reading either the Fifth Book of Lessons or the Biographical Sketches of the British Poets.

On Saturday, from 12 till 1½, geography, occasionally reading the "Generalized Geography," and having it explained. I have found it very useful and improving for the girls to prepare questions, at home, on a given portion of geography, and interrogate each other in class.

E. Lavender,

Teacher of Infants' School.

c.—Subjects of Instruction for Monday and Tuesday.

Spelling and explanation of Lesson Books to Fourth Book inclusive, lessons on animal physiology, contained in Boys' Fifth Reading Book. Three first parts of Spelling Book Superseded, Practical Rules for Spelling, Orthography, and English Etymologies. Writing from dictation, from copy lines, and exercises on different subjects.

Mary Grace,

Assistant Mistress of Girls' School.

APPENDIX D.

STATEMENT OF THE VARIOUS KINDS OF NEEDLEWORK TAUGHT IN THE GIRLS' SCHOOL.

Plain needlework—Dressmaking, shirtmaking, patch-work, and darning in various fancy patterns.

Embroidery—Collars, caps, and veils, with ornamental pieces in Berlin.

Crochet—Collars, under sleeves, nets, doileys, anti-macassars, and other useful and ornamental articles.

Knitting—Stockings, gloves, window-hangings, chair-covers, and quilts.

Since the opening of the School in May, 1850, the sum of £7 has been expended in the purchase of various articles required for this branch; such as work-baskets, needles of different sorts, thimbles, silks, thread, wool, canvas net, muslin, calico, &c. The materials have been all made up by the children in the school, into various specimens of plain and ornamental work; and from these four of the girls who left the establishment as Teachers, have been furnished with the specimens they most required. Some of the articles were purchased, and after deducting the cost of the material, the remainder was distributed among the girls who had made them up. All the articles not disposed of remain in the school for the inspection of visitors.

ROSE TUITE.

APPENDIX E.—QUESTIONS IN MUSIC.

(*These questions were prepared by Mr. George Washington.*)

a. SENIOR CLASS OF GIRLS.

1. What is the difference between melody and harmony?

2. What is an interval? What an inversion? Tell what each of the following intervals becomes when inverted, and write down the inversions.

3. Show by a diagram, the construction of a chromatic scale?

4. How is the relative minor to any given major scale found? Why is such a scale said to be relative? Why said to be minor?

5. What is the difference between "a slur" and "a tie" or "bind?"

6. What major and minor scales do the following signatures indicate?

APPENDIX H.

I. Reports on District Model Schools.

Trim.

7. Represent the following passage in the bass clef :—

8. Place the *time* signatures before each of the following bars :—

b. PUPIL-TEACHERS.

1. How would you proceed to teach a class of children to sing in parts?
2. Explain the difference between the major and minor modes of the diatonic scale?
3. How many *clefs* are there? and for what purposes are they used?
4. Name the different kinds of voices.
5. What is a tetrachord, and how many in every scale?
6. Of which sounds in a scale can we form a triad?
7. What is the difference between melody and harmony?
8. Give examples of a *minor third*, *pluperfect fourth*, *perfect fifth*, and *minor seventh*.
9. Write the signatures of the following major scales, (Re) (Si, ♭) (Mi) (La, ♭).
10. Represent the following passage in the *treble* and *tenor* clefs :—

11. Place the proper time signatures before each of the following bars :—

12. Explain the meaning of the terms, crescendo, andante, mezzoforte, rallentando, and dal segno.

APPENDIX F.

SYNOPSIS of the BRANCHES TAUGHT, and the METHOD of TEACHING pursued at the TRIM INFANT MODEL SCHOOL.

This school is divided into five classes, and these classes are again subdivided. The following is the course of instruction carried on :—

1. Reading and spelling.

2. Writing on slates.
3. Arithmetic and tables.
4. Grammar.
5. Geography.
6. Natural History and Object Lessons.
7. Rudiments of Geometrical Lessons.
8. Singing.
9. Religious and Moral Instruction.

Reading and Spelling.—1. Tablet Lessons;—2. First Books;—3. Second Book;—4. Sequel.

Writing on Slates.—From strokes and letters to words in round hand.

Arithmetic and Tables.—Arithmetic is taught mentally in simultaneous lessons on the gallery, including multiplication and money tables. The children of the higher classes are taught to work sums on their slates from the black board and from dictation, comprising notation, numeration, addition, and subtraction.

Grammar.—The Sequel and Second Classes parse simple sentences Etymologically on any of the Tablet Boards; the other classes are taught the parts of speech, and how to apply them.

Geography.—In teaching geography the children are arranged into two divisions: pupils of the lower are taught the definitions and general outlines from the Map of the World; those of the higher are taught in addition the Maps of Europe, Asia, Ireland, and also to name the principal countries, chief cities, mountains, rivers, and lakes.

Natural History and Object Lessons.—These branches rank the highest in our infant education, as in these we endeavour to develop, to interest and instruct the infant mind. Our first step is to teach them that nature is divided into three kingdoms, or that every thing on earth can be classed under one of these heads, vegetable, animal, or mineral. These subjects are taught as far as they can be readily understood; a few of the classes and orders of animals, such as mammalia, bipeds, quadrupeds, carnivorous, and such domestic animals as children should be familiar with. Their knowledge of plants and of minerals they derive from object lessons.

The lessons on zoology are given from pictorial cards. For example, presenting a picture of a tiger, we ask, what does this represent?—what domestic animal resembles the tiger? How far does the cat resemble it in appearance and in its nature? When we mention the cat, they easily understand and can compare the different points in which the tiger and cat resemble each other; their contrast in size; the one in its wild state, and the other tamed. The questions are continued in a similar manner. Lessons are also given on other objects, which vary every day. In giving a lesson, we present the object—a penny, for instance—we ask the children what it is. They answer. What is it made of? answer, copper. What is copper? answer, metal. To what kingdom of nature does

it belong? answer, mineral. The lesson is thus continued; and, generally speaking, the children, after a little, understand not only the various properties of the object before them, but also those of many others in connexion with the lesson. The powers of the mind are thereby exercised, and their faculties developed. During these lessons the children are very happy, and we generally take this opportunity of directing their young minds from the objects themselves to the source, from whence they spring, "The great Creator of all good."

Rudiments of Geometrical Lessons.—The children are merely taught the forms and names,—as squares, oblongs, angles, and triangles.

Singing.—This branch is taught with the two-fold object of laying the foundation of a correct ear and taste in singing, and as a medium of a moral and, indeed, generally useful instruction. While the airs are pretty, cheerful, and well selected, the words carry with them information either upon the ordinary trades and manufactures, or awaken the feelings of benevolence and devotion. Many of the children sing in parts, and the harmony has been acknowledged very sweet.

The *Religious Instruction* is given in accordance with the wishes of the parents, and under the direction of the clergymen to whose flock the children belong.

E. LAVENDER,
Mistress of Infants' School.

Appendix G.

Time Tables.

a. Boys' School.

General instruction begins at 10 o'clock, and ends at 2½, on the following days:—Monday, Tuesday, Wednesday, Thursday. On Friday, it ends at 1 o'clock, when religious instruction commences. On Saturday, it begins also at 10 o'clock, and ends at 12, when the children are dismissed.

Occupation of School Time.

Time.	Second Class.	Third and Fourth Classes.	Fifth Class
10 to 10¾	Reading and Explanation.	Spelling or Grammar.	Dictation, or Parsing, and Mental Arithmetic.
10¾ to 11½	Geography or Grammar.	Reading and Parsing.	Writing and Geography.
11½ to 12	Writing.	Arithmetic.	Algebra or Geometry.
12 to 12½	Recreation.		
12½ to 1¼	Reading and Explanation.	Writing and Geography.	Arithmetic.
1¼ to 2	Arithmetic.	Lesson in Reading and Explanation.	Lesson in Reading and Explanation.
2 to 2½	Dictation and Tables, or Mental Arithmetic.	Dictation and Tables, or Mental Arithmetic.	Mensuration, Spelling Book, or Book-keeping.
2½ to 3	Religious Instruction.		

On Saturday, Fourth and Fifth Classes write exercises from 10 till 11 o'clock, and Third Class boys are similarly engaged from 10¾ to 11½. During the time not so employed, all the pupils are taking a review of what they read during the week.

Singing on Monday and Thursday, from 2 to 2½ o'clock.

b. Girls' School.

General instruction begins at 10 o'clock, and ends at 2½ o'clock, on the following days:—Monday, Tuesday, Wednesday, Thursday. On Friday it ends at 1 o'clock, when religious instruction commences. On Saturday, it ends at 12 o'clock, when the children are dismissed.

Occupation of School Time.

Time.	First, Second, and Sequel Classes.	Third and Fourth Classes.
H. M. H. M. 10 0 to 10 45	Reading.	Writing.
10 45 to 11 30	Writing and Tables.	Reading.
11 30 to 12 0	Grammar or Geography, on alternate days.	Grammar.
12 0 to 12 30	Recreation.	
12 30 to 1 30	Needlework.	
1 30 to 2 10	Reading. Sacred Poetry to form subject of Lessons two days each week.	Arithmetic.
2 10 to 2 30	Arithmetic.	Geography.
2 30 to 3 0	Religious Instruction.	

Singing.—All the classes are taught Vocal Music, from 2 till 2½ o'clock, on Tuesday and Thursday.

---

c. Infants' School.

From 10 to 10½, ... Morning Hymn.
,, 10½ to 11½, ... Tablet Lessons.
,, 11½ to 12, ... Relaxation.
,, 12 to 12½, ... Writing.
,, 12½ to 1, ... Singing.
,, 1 to 1½, ... Luncheon.
,, 1½ to ¼2, ... Relaxation.
,, ¼2 to 2½, ... Gallery Lesson.

Religious instruction from 1 till 3 o'clock on Fridays, and from 2½ till 3 on each of the other days, except on Saturdays, when there is none given.

II. Report on Lectures delivered at the District Model School of Clonmel, during the year 1852, by Edward S. Clarke, M.D., M.R.I.A, District Inspector.

Gentlemen,—I have already, in two Annual Reports of Lectures delivered by me in this Institution, on the subject of applied Physical Science, stated at some length, the importance of giving scientific instruction of such a character as would directly bear on the practice of the various arts, including Agriculture; and I supported the views which I then advanced, by the opinions of distinguished Educationists and scientific men; and although much induced by the various proofs of the correctness of these opinions which the recent "Great Exhibition" has brought to light in the Reports of its various Committees, I shall no longer urge any further extension of this species of instruction, as enough has been already said and done by myself and others, to show our opinion of its importance, and, doubtless, grave reasons have prevented the Commissioners from adopting an opinion which has been proclaimed, not only from the humble halls of Mechanics' Institutes, or the chairs of learned professors, but even from the Regal Palace of England.

I shall, therefore, make this retrospect of my last year's labours in this department as brief as possible, merely stating, that I have endeavoured, at my weekly visits to this Model School, to give some continuance of such instruction, particularly in the theory and practice of tanning and distillation, thus communicating a knowledge of the most recent improvements in these arts; and noticing the improvements consequent on the Great Exhibition, in some branches of manufacture. I have also to state, that having, nearly two years since, called the attention of some of the clergy and merchants of this town to the rich hæmatites and specular iron ore abundant in the neighbourhood of Clonea, at Cruckawen, in the county of Waterford, and also to the oxide of manganese, of the same county, some specimens of which, at my request, were forwarded to Liverpool merchants; and having also called attention to the sulphate of barytes of the county Tipperary—which latter, although not a valuable mineral, could be used to advantage, in a place where manual labour is so cheap. And having exposed these minerals in the Clonmel Model School to public view, together with other specimens of Irish ores, I now learn, with satisfaction, that the extraction of the two former mineral treasures is at present going forward in the localities where, two years since, I had pointed out their existence.

They were the substances alluded to in the following question, being the 169th of a series used by me at my examinations, on the subject of Geology, Chemistry, and applied science generally, and published in the 18th Report of the Commissioners viz:—

No. 169. "Mention sources of wealth existing (but not

APPENDIX H.

II. Lectures in Clonmel District Model School.

Dr. Clarke.

yet made available), in the counties of Waterford and Tipperary."

And as a case in point, I cannot better illustrate the importance of even a slight notice of a new source from which a supply of any useful mineral may be obtained, together with the exhibition of the mineral itself, than by calling attention to the important benefit conferred upon the iron trade of Northampton, by the inquiry which a specimen of iron ore excited by its presence amongst the minerals of the Great Exhibition. The value of this ore was not understood, and it was marked in the catalogue as of "no commercial importance."

Yet, but for the discovery of this very ore, the iron trade of that extensive district, hitherto the second in importance in the kingdom, would soon have ceased, in consequence of the great expense of its argillaceous ores, whereas now, owing to this discovery, it bids fair to rival, if not surpass, the hitherto most favoured localities of the kingdom.

This fact would furnish additional evidence in favour of collections of ores and minerals of industrial importance at our Model Schools, and points to the importance of instruction such as that I have given in this one ; but having, for the reasons already assigned, declined to enter in detail in favour of such a project, I only introduce the subject in this place, in connexion with a similar fact occurring here, and more in notice of the past, than in promise of the future.

I have now to give a brief account of a branch of instruction new to our Model Schools, namely, Physiology, and the elements of Human and Comparative Anatomy, which subjects I have introduced at this School during the last year, on the occasions of my weekly visits, and thus carried into effect, as far as the time permitted, a promise contained in my Report on this School, for the year 1851, namely, to include Animal and Vegetable Physiology as a part of my course of instruction—a plan which I adopted, with a view chiefly to the service of the Pupil-Teachers—believing, as I did, that these young persons would go out badly qualified to execute their educational mission if uninformed on the structure and functions of the human body; particularly as there are several important lessons on this subject, in the books of the Board, which, for want of diagrams and other necessary illustrations, had not hitherto been fully understood by the Teachers, and could not efficiently be taught without such instruction.

These Lectures on Human and Comparative Anatomy and Physiology, will also serve as a useful supplement to Natural History, so well introduced by the valuable "Lessons on Zoology." This they will do by teaching some of the departments of this science, in a comprehensive manner, by laws applicable in common, to large sections of the animated races, and giving a comparative completeness to the elementary teaching of that extensive subject.

Had circumstances permitted it, I would have preferred

teaching the physiology of the vegetable, before that of the animal kingdom; but as some of the Pupil-Teachers and advanced pupils had nearly completed their studies, and were about to withdraw from the School in a short time, and, therefore, could not enjoy the benefit of both courses, I preferred under the circumstances, to teach in detail that portion of Physiology which embraces the animal kingdom, pointing out the functions necessary to the healthy condition of man, and explaining the causes of many serious diseases, which arise from the corrupt practices of so-called civilization, as in dress, hours of taking food, also those which attend neglect of cleanliness, carelessness as to the amount of light and air in dwellings, errors in ventilation, &c., this knowledge is necessary to *every* man, whatever may be his occupation in life, whilst the organization and general physiology of vegetable life, though highly important, are not so much so. Besides which reasons I was also influenced by the fact of my having on other occasions given an account of the elements of this latter science, in order to enable the Pupils to understand the principles of Agricultural Chemistry. I have also entered into some detail in Anatomy, both Human and Comparative, always using for this purpose, means of illustration never capable of exciting disgust, and for the most part illustrated either by preparations from the bodies of animals, killed for domestic use, or by diagrams which the skill of the Pupils in drawing, enabled me to have prepared in considerable abundance, and of large size. For which skill, the School is indebted to Mr. P. Brophy, a zealous and efficient teacher of that art, sent, by the kindness of the Commissioners, to instruct the pupils of this institute; and I have much pleasure in stating, that were it not for the facility of preparing diagrams thus afforded, this instruction would not have been in any department nearly so effectual as it has been.

As to the proficiency made in these branches of knowledge, I have to state, that it was more than could have been expected under the circumstances of the small amount of time bestowed upon it by the pupils; and I have to add, that on several occasions during that year (1852), the pupils were examined for two or more hours on each occasion, before visitors of rank and professional knowledge, as Professor Shaw of Queen's College, Cork, Dr. M'Knight, Editor of the *Banner of Ulster*, and some of the family of Colonel Phipps, and the Honourable Mr. Gough; and not only on Physiology, Human and Comparative Anatomy, but also on the elements of Geology, Chemistry, Mechanics, the Steam-Engine, Hydrostatics, Pneumatics, and Optics; and the recorded opinion of these visitors, particularly of Professor Shaw and Dr M'Knight, were in the highest degree creditable to the pupils, and flattering to myself, and will, I believe, be published in the Report of J. W. Kavanagh, Esq., to whom, as Head Inspector, was committed (jointly with me) the management of the School.

APPENDIX H.

II. Lectures in Clonmel District Model School.

Dr. Clarke.

There is also appended to this Report, a series of questions such as I have been in the habit of giving at my occasional examinations, on the subject of Physiology, and Human and Comparative Anatomy. These will serve to give an idea of the course, to those who have never heard the pupils examined. Most of these questions are such as the pupils would immediately answer from the instructions they have already received, and all of them will be fully understood before this Report reaches the public eye.

They consist of questions on each part of the elementary course of instruction, which I have given them, and contain 259, thus arranged :—

General principles of Zoological classification,			No.	1 to	43
Elementary questions on Osteology,			44	,,	66
,,	,,	Myology, or the Muscular System,	67	,,	77
,,	,,	The Nervous System,	78	,,	95
,,	,,	The Vascular System,	96	,,	128
,,	,,	Respiration, Ventilation, &c.	129	,,	157
,,	,,	Digestion,	158	,,	193
,,	,,	Comparative Anatomy,	194	,,	234
,,	,,	Evidence of design in the structure and arrangement of animal bodies,	235	,,	259

It will be observed that these subjects have not been in all cases kept distinct, and that in none are they *very* full, but the object has been to make them such as to elicit answers necessarily founded on a rational consideration of each subject, and as comprehensive as possible.

The questions on the evidences of design are also few, as they conclude this Report, which is already sufficiently long, and as several others are, in many cases, interwoven with the description of the organs themselves, under their respective heads ; but on no part has my instruction been more full than on this, as powerfully tending to implant the most salutary impressions on the minds of the pupils. Finally, although the utilitarian character of the instruction now reported on is not so palpable as that of the courses of applied Chemistry, Geology, Mechanics, the Steam-Engine, and the other branches of elementary Physics, which I gave during the years 1850 and 1851, it is, nevertheless, indispensably necessary to a course of instruction essentially rational, and approaching to a perfect English education ; and although less able to minister to the actual pecuniary necessities of a people, than the physical and chemical instruction, which it does not supersede, but only alternates with, it will enable the young Teachers, for whom it was mainly intended, as well as their advanced pupils, to understand more fully the providence of God, as manifested in the wondrous structure of organized beings, and may be the means of diffusing amongst thousands of their future Pupils, more correct notions on subjects connected with the maintenance of health and bodily vigour, as well as of inspiring them with higher feelings of gratitude to

the Supreme Being who designed, created, and still sustains systems of animated beings, so perfect, so varied, so vast, and so minute.

In my next course, I propose to continue the subject of Physiology, by considering the composition and growth of tissues, both animal and vegetable, the chemical nature of the aliments necessary to each race, and the variations which climate, &c., render necessary in this respect; and particularly, to introduce in fuller detail the subject of Vegetable Physiology and Botany, not merely as being, from its simplicity, the most natural introduction to Physiology in general, in the case of pupils who may not have attended my former instruction, or even solely as essentially connected with Agriculture, but also because the elements of structural and even systematic Botany, are essential to many other branches of industry. Thus the most laboured specimens of floral embroidery, and also of paper-staining, and other decorative arts, are frequently rendered comparatively worthless, owing to want of a knowledge of the elements of botanical science. Neither is it of small importance that the Teachers should be able to illustrate the botanical lessons contained in the Board's books, by actual reference to the objects themselves; and to give in numberless instances of design, which this science affords, additional proofs of Almighty Providence.

It is also of scarcely less importance that the elements of physical science be not neglected during the present year, as the minds of children are like the soft wax which the next impression tends to efface, and therefore frequent renewal of important branches of knowledge is absolutely necessary. And this remark applies particularly to the branches of physical science, which, from their extent and number, must (even when treated of in an elementary manner), cause an interval of considerable time between each, especially when, as in this case, the instruction is given at most but for two or three hours weekly, and generally after the school duties of the day have closed. But although such is my desire, I cannot with certainty promise its execution, owing to the arduous nature of my duties, amongst which the varied instruction alluded to, as given, and to be given, is not included.

I have the honour to be, Gentlemen, your most obedient servant,

E. S. CLARKE, M.D.,

District Inspector of National Schools.

APPENDIX H. II. Lectures in Clonmel District Model School. *Dr. Clarke.*

QUESTIONS used by Dr. CLARKE, during the year 1852, in examination of the Pupil-Teachers, and Pupils of the CLONMEL DISTRICT MODEL SCHOOL, who attended his lectures on the elements of Animal Physiology, and of Human and Comparative Anatomy and Natural History.

INTRODUCTORY QUESTIONS ON ZOOLOGICAL CLASSIFICATION.

1. State the basis on which the elementary division of animals into two classes was founded by Lamarck, and mention the objection raised by Cuvier to embracing the entire invertebrate animal kingdom, in one division or class. Also state the number of sub-divisions which he proposed.

2. Describe the forms of nervous system found in each of the four divisions, viz. :—

Vertebrate.			
Invertebrate	Class,	.	1.
Do.,	Do.,	.	2.
Do.,	Do.,	.	3.

3. Name the three great divisions into which invertebrate animals have been divided.

4. Give the reason for the name quadrumana being assigned to the second order of mammalia.

5. Mention the meaning of the term "Cheiroptera," or hand-winged ; explaining particularly the first part of the term ; say also how many species of this order in Ireland.

6. Taking the mole as a type of insectivorous mammalia, mention the circumstances of its limbs, head, covering, and eyes, which fit it for its mode of life.

7. Describe the general form of animals of the 5th order of mammalia, and allude to any peculiarities in the teeth, feet, ears, and intestines of animals of that class.

8. Mention the peculiarities of the 6th order or cetacea, as to tail, fins, covering, size of asophagus, and nature of teeth, stating the substitutes for these organs in one variety.

9. Mention the meaning of the term pachydermata ; give examples besides the elephant ; and include one whose appearance does not accord with the character assigned by the term.

10. Are the "Edentata" completely toothless ? If not, state any peculiarity of their dental system.

11. What exception do the teeth of the rodentia present to an otherwise almost universal law ?

12. Where are the marsupiata found ? Mention the general characters of the class, adding whether their skeleton differs in any respect from that of ordinary mammalia.

13. State the number of orders into which the class aves or birds have been reduced ; giving the derivation of the name of each order, and examples under each head ; state also the number of cavities in the heart of animals of this class.

14. Is it true (as one of our Lesson Books asserts) that the insessores are known by three toes before and one behind?

15. Give an example of the family of zugodactyli (3rd tribe of scansores) also state derivation of the name; and object of the form of foot which gave rise to it.

16. In the family "Grallatores," say why there are usually long legs, naked above the knee, long neck, and long bill; also mention the best example (among the Irish birds) of this order.

17. Mention the provision in aquatic birds for making the feathers repulsive of water.

18. What benefit do you believe to result from the entrance of air into the bones of birds? Do you believe it to be for the purpose of diminishing their specific gravity as is asserted? If not, state your reasons for dissent; and assign a more probable one.

19. Mention the four orders into which reptiles are divided; state the characters of the class: as to mode of production, temperature, number of cavities in the heart, and tenacity of life, or otherwise.

20. State the proportion of species of venomous ophidians to the whole number of species. Mention also the number of venomous ophidia indigenous to Great Britain.

21. What animal furnishes the tortoise-shell of commerce?

22. Mention any peculiarity which you are aware of, with regard to the tongue and feet of the chamelion.

23. What geological period has been, not unaptly, styled the age of reptiles?

24. Why does the common frog leave the water in summer?

25. Mention anything you know as to the forms of ichthyosaurus, plesiosaurus, and pterodactylus; and give the meaning of the name in each case.

26. Mention the two great divisions of the class, fishes.

27. Name the six orders into which the osseous fishes have been divided, or state in each case the principle on which the name of the order was founded.

28. Mention the names of the three orders into which all cartilaginous fishes have been divided.

29. For what are the sturiones or sturgeon order remarkable in a commercial point of view? And for what in a geological sense?

30. Why is one variety of isinglass called staple isinglass?

31 What is the principal office of the air bladder of fishes?

32. Into how many great divisions or groups have inver- [illegible] divided? and give the cause of the name [illegible]

33. State the two great groups into which the mollusca have been divided.

34. Amongst the Encephata, mention two species remarkable for being the source of any permanent colouring matter; and say which of them it was whose living excretion was used in the formation of sepia. Name also that whose shell

Appendix II.

II. Lectures in Clonmel District Model School.

Dr. Clarke.

appears to have furnished the ancient and valued *Tyrian purple.*

35. Mention the classes into which the articulated animals have been divided.

36. As the deeply segmental form of the bodies of the arachnida, or spiders, appear to have merited the term "insecta," as well as those on which it has been bestowed, state the reason of the arachnida being considered as a separate group.

37. As the essential character of an insect is to undergo transformation, and be, to all appearance a totally different animal at different stages of its existence, mention something of the transformations of the butterfly and silk-worm, also of the ephemera, and give the reason of the latter being so called.

38. Is there anything remarkable as to the position of the gills in some of the crustacea, and of the manner in which they sometimes part with their limbs?

39. Describe the eyes of the fossil trilobite; and show the information they give as to the condition of the ancient seas, and of light and the atmosphere.

40. Why are the cirripeda so called, and what was the ancient opinion as to the lepas or barnacle?

41. Name the four classes into which the Radiata have been divided, and mention something of the remarkable structure of the echinidæ, as to the mechanical facilities afforded to the rotation of their spines, of its dental apparatus, and internal fixed pulleys for altering the direction of its muscular force.

42. Give some account of zoophytes or polypes; state their mode of life and general appearance, and why coral reefs do not extend higher than low-water mark. State your opinion as to the source of the carbonate of lime, with which the reefs are built, and afterwards repeat and explain the poetry on this subject, in the 5th Book of Lessons.

43. Explain the error fallen into by some persons as to the source of infusorial animals.

Osteology.

44. Is the composition of bone altogether restricted to one of the three kingdoms of nature? If not, state those from which its constituents are derived.

45. What appears to be the benefit of this arrangement?

46. Name two diseases which result from a departure from this usual proportion of the animal and mineral constituents of bone.

47. If you wished to exhibit a proof of this constitution of bone, and of the effects it produces, what experiment would you make in illustration, such as you have yourself seen?

48. What are the great benefits which the osseous system confers on animals possessed of a muscular and nervous system?

49. State the chief points deserving of admiration in its structure and parts.

50. What is the object of the odontoid process in the 2nd vertebra?

51. State number of vertebræ in the body, the meaning of the term pelvis, and the manner in which the ribs are joined to the sternum and to each other. Does each rib articulate with more than one vertebra?

52. What is the nature of cartilage?

53. What two principal services do the cartilaginous termination of the ribs effect?

54. Why are there so many bones in the foot, and is its form deserving of any special notice?

55. Name, briefly, some of the points of interest in the architecture of the skull.

56. Name the bones which are provided with perfect ball and socket joints.

57. What are the membranes termed, which invest such joints?

58. Is there any influence external to the human body, which tends to keep these large joints in firm apposition?

59. What are tendons? Give examples.

60. To what disease is tendonous structure chiefly liable?

61. Why does rheumatism occasionally produce "Heart disease?"

62. Mention the name of the fluid which lubricates the joints of mammalia.

63. Has the scapula, with its attached arm, any bony attachment to the other parts of the skeleton of man? And if so, name it.

64. Is the articulating process of the femur in a direct line with the shaft of that bone? If not, show the evidence of design visible in that arrangement.

65. Mention also the position of the tibia and fibula in each leg, and of the chief use of the radius in the arm of the bimana, quadrumana, and some other mammalia.

66. State whether the pelvis is absent from any one order of the class mammalia.

Myology or the Muscular System.

67. What is the chief object of the muscular system?

68. Name the agents used to excite, and produce motion of the limbs in the class mammalia.

69. What is the effect produced on a muscle, through the agency of the nerves, in consequence of which motion of a living body occurs?

70. Is the amount of contraction so caused; or, in other words, the space passed through by the free extremity of the muscle considerable?

71. Since the space passed over is not considerable, mention the contrivance, by means of which it is rendered sufficient,

APPENDIX H.

II. Lectures in Clonmel District Model School.

Dr. Clarke.

for all purposes of locomotion. Mention the office of each of the following muscles, and give their origins and insertions :—

Deltoid.
Intercostals.
Rectus femoris.
Soleus and gastrocnemius.

72. Mention the office of the great pectoral muscle, both in mammalia and birds.

73. Name the muscle which flexes the fore arm ; state the cause of its name, and give its origin and insertion.

74. Mention the probable reason why the sternum is usually so much more prominent in birds than in mammalia.

75. Give examples of the different shape of the sternum in birds, according to the necessity for its use, in aid of powerful flight, or the contrary.

76. Why have dancers well developed muscles of the leg, whilst those who use tight and strong shoes or boots, as the waggoners of England show a marked deficiency in that respect ?

77. Name and describe some of the more important involuntary muscles.

NERVOUS SYSTEM.

78. How may the nervous system be divided ?

79. What form does the nervous system present, respectively, in the Annellata, Mollusca and Articulata ?

80. What analogy does the nervous system of mammalia present to that of the classes just mentioned, particularly to that of the articulata ?

81. How many ganglia or nervous masses are there in the brain of fishes and reptiles ?

82. Is there any relation constantly observable between the intelligence of animals, and the size of one of the nervous masses or ganglia alluded to ? Give examples in illustration.

83. Is there any relation to be traced between the *activity* of the animal and any one of these ganglia, which is consequently regarded as regulating motion ? If so, state experiments to prove the fact.

84. In what animal do the cerebral hemispheres bear the largest proportion to the mass of the body.

85. In what two animals do you find the cerebellum especially large, and why ?

86. Is there any relation (inverse or otherwise) observable between the size of the nerves, compared with the cerebral masses of special sense out of which they issue, and the intelligence of the animal, so as to lead to an opinion as to the parts of the brain connected with instinct ?

87. Mention the number of principal nerves contained in the human body, exclusive of the ganglionic system, dividing them into—

Cranial nerves.
Spinal nerves.

88. State the office of the ganglionic or sympathetic system of nerves; also the cause of each of these designations.

89. Name the nine cranial nerves and their uses; also point out the reason of your certainty as to the number of the spinal nerves, with relation to their origin, *i.e.* point out the relation between the number of the vertebræ and the number of the spinal nerves.

90. Mention duties common to all the spinal nerves.

91. State the circumstances to which the spinal nerves owe their power to communicate both sensation and motion to the part supplied by them, and mention Sir Charles Bell's experiments on this subject.

92. State your notion of what is called the reflex nervous system; and say why a person who has lost the power of moving one or more of his limbs at his pleasure, will, nevertheless, find it withdrawn from any source of irritation applied to it, although if not looking at it, he may be unconscious of the motion.

93. State whether any inosculation occurs between the branches of the spinal nerves, even when bound up in the same sheath.

94. Has the spinal column any power of exciting muscular motion, independent of the brain? If so, state in what class of animals that power is most observable, and in what class least.

95. State the object of a sentient branch accompanying each spinal nerve; and also to what part of the body sentient nerves are chiefly distributed, and mention the benefit of this distribution.

Vascular System.

96. What are the elements of blood, and why is it circulated in the bodies of animals?

97. How is its purity preserved, since some of its nutritive parts are given out to the system at each circulation, and the waste portions of the body are mixed with it?

98. When was the circulation discovered, and by whom? Can you distinguish between the blood of mammalia and other vertebrated animals?

99. Mention the classes of animals in which a heart is used to circulate the nutritive fluid.

100. By what means is the blood, or nutritive fluid, circulated in insects?

101. Is blood necessarily red?

102. Mention animals which possess hearts with only one cavity.

103. Mention those with two cavities?

104. Since mollusca and fishes have each two cavities in the heart, what is the difference between the circulation in these different classes?

105. State the class, the members of which have three cavities.

106. How many *kinds* of natural cavities can a heart pos-

Dr. Clarke.

sess? Give their names, and state the cause of the name in each case.

107. Describe the circulation in reptiles, and state why these animals are cold-blooded.

108. Describe the circulation in fishes.

109. Owing to what two circumstances is it that fishes are cold-blooded, even more so than reptiles, although the blood is *all* arterialized in the former, and a part only in the latter?

110. Is there any reptile which possesses warm blood in its head and upper extremities, and cold in the lower; and if so, is any providential care manifest in this arrangement?

111. Explain by this diagram how the different parts of the crocodile alluded to can thus have blood of different temperatures in its different parts.

112. Describe the circulation in crustacea.

113. How is the blood which is discharged into the aorta of mammalia during the systole or contraction of the left ventricle prevented from falling back again during the diastole or relaxation of the same ventricle? Illustrate your answer by one of the many diagrams before you.

114. How many valves are there in the heart of each of the mammalia? State also their positions and names.

115. Which are the auricles or ventricles the stronger in muscular substance? State the reason of the difference.

116. Which does the left or right ventricle possess the stronger muscular mass, and why is one stronger in this respect than the other?

117. What are arteries, and how many coats has each?

118. What is the great value of the central or elastic coat?

119. Nature strengthens parts affected by additional labour. Can you explain by this fact the cause of the disease of the heart, called hypertrophy of the left ventricle; and how an ultimately fatal disease is engendered by this curative tendency of Nature?

120. Mention the symptoms of valvular disease of the heart.

121. How may nervous palpitation be distinguished from it?

122. Explain the nature of aneurism of the aorta, and how Nature usually guards against its occurrence.

123. What agency does the muscular system exert upon the circulating?

124. Could you prove the truth of the circulation of the blood by any experiment on the venous system of a living man?

125. Describe the structure and use of the valves belonging to the venous system.

126. State to what side of the heart do the veins carry the blood, and give the names of the vessels which are immediately connected with that side.

127. Is there any analogy between the large cranial veins of man, and the veins or sinuses of crustacea?

128. Why are there no valves in the cranial veins?

129. What is the object of respiration in all animals?

130. Name the simplest kind of respiration, viz., that in which no organ is exclusively devoted to this function.

131. Name the respiratory organs used by each of the following classes, stating them in the order of the simplicity of their respective functions in each case, viz. :—

Mammalia.	Mollusca.
Birds.	Crustacea.
Reptiles.	Insecta.
Fishes.	Annellata.

132. By what means do the gills of fishes and reptiles ærate the blood?

133. Mention some of the various positions of the gills amongst the following animals :—

Crustacea.
Oysters.
Nereides.
Serpulæ.
Sea Slugs.

134. Mention any difference known to you between the arrangement of the gills and their covers, in fishes, according as they have osseous or cartilaginous skeletons.

135. Are you aware of any difference in the habits of animals with relation to the perfection, or otherwise, of their systems of respiration?

136. Describe the mechanism of the respiratory process in the mammalia, alluding particularly to the muscles which expand the thorax both vertically and horizontally; mention also in which of the two states (active or passive) the lungs are during the process.

137. Describe the process of respiration in birds, so far as it is peculiar to them, and state if any similarity exists (though rather remote) between the respiratory apparatus in birds and insects.

138. Mention any experiment in proof of the theory that the carbonic acid evolved during the respiration of mammalia is not formed in the lungs, but only that it is exchanged there, for oxygen; also state where it probably is formed.

139. What classes of animals are most rapidly destroyed by being deprived of pure air?

140. Why is the blood not well ærated in reptiles?

141. Mention the nature and use of the following parts :—

Trachea.	Epiglottis.
Larynx.	Chordæ vocales.
Glottis.	

142. As the food in passing to the œsophagus must pass over the rima or opening of the glottis, state how it is prevented from entering through it into the trachea and lungs.

143. Suppose there were no other deterioration of the air

APPENDIX H.

II. Lectures in Clonmel District Model School.

Dr. Clarke.

once breathed than the introduction of $\frac{1}{26}$th part of carbonic acid (which all respired air contains) and that one part of carbonic acid in a hundred of common air rendered the latter oppressive, show what height a room, not ventilated, should be in order that oppression should just begin to be felt in it, if 60 feet high by 30 feet broad, and occupied by 100 persons during five hours.

144. Show that, owing to other causes of deterioration of the respired air, besides that just mentioned, an unventilated room of the size and height given, would be wholly unfit for respiration long before five hours.

145. Name two effects which a fountain playing in a separated part of a crowded room would have on its atmosphere.

146. Calculate the size of the openings for entrance of the pure air and exit of the impure, so that no air should be breathed a second time in a school or other room where 100 persons are to collect and remain, the velocity of the air entering and leaving not to exceed twenty feet per minute, and show the grounds of the calculation.

147. State the influence of height on the purity of the air of a room, the area of the floor being small compared with the number of persons in the room.

148. Is there much difference between the quantity of air necessary for an adult and for a youth?

149. State the number of times respiration is performed per minute in a child, and also in an adult.

150. Since ventilation, as commonly attempted, is usually very imperfect, prove that in a room 10 feet high, a superficial area of floor equal to six superficial feet for each child is an inadequate supply for five hours?

151. Show the cause of that sense of oppression of the respiratory organs and nervous system which is felt in school-rooms ceiled at the top, and the lower part of the sashes only made capable of being opened.

152. When decaying vegetable and animal matter is kept in the immediate vicinity of a dwelling, show the chemical causes which induce a low condition of the powers of life, and ultimately typhus fever.

153. Mention the probable cause of the chemical action which induced the fatal results which attended the ships of the Niger expedition, particularly whilst in the estuary of that river.

154. Describe the chemical changes by means of which chlorine purifies the atmosphere of places affected by imperfect sewerage.

155. Explain the nature of bronchitis.

156. Mention the nature and usual position of pneumonia or inflammation of the lungs, and the reason why blistering and bleeding are useful, and why in all cases of vascular inflammation of the lungs, ardent liquors or strong stimulants should be avoided.

157. Mention the nature of the disease commonly called consumption, in what part of the lung it exists, and if any beneficent design visible as to the position in which it is usually found.

Digestion.

Dr. Clarke.

158. What essential difference is there between a vegetable and an animal, as to the process of digestion?

159. Why do not living vegetables require a digestive cavity or stomach?

160. Is there any intimate connexion between the function of the living membranes of the exterior and interior of the simpler forms of animal life, as seen in polypes?

161. As the term digestion is often misunderstood, state its meaning.

162. Name the organs essential to digestion in the order in which their functions are exercised, commencing with mastication, and ending with complete sanguification in the lungs.

163. Mention the double office of the liver in the animal economy.

164. Name the agent which converts the masticated food into chyme in the stomach, and that which further changes it into chyle in the duodenum; also give the cause of the latter name.

165. State whether the liver *constantly* secretes bile during health, and whether it is as constantly poured into the duodenum, and give an account of an experiment in proof of your answer.

166. Since the bile *is constantly* secreted, but not poured into the duodenum during abstinence from food, give the name of the organ into which it passes, and also of the vessel which conveys it from that recipient into the duodenum.

167. What are the chemical constituents of bile?

168. Why is common salt necessary to be used with food by mammalia?

169. Through what vessels does the chyle pass in its progress to the heart?

170. How is the fluid of the thoracic duct supposed to be impelled, or caused to advance towards the subclavian vein?

171. Can you refer to any experiment in hydrostatics illustrative of the supposed cause of this action?

172. Can you mention any experiment to show that capillary attraction is connected with the advance of the fluid in the thoracic duct?

173. Since the parts of the body are constantly undergoing changes, by receiving new particles of nutritive matter for the blood, and parting with the old, state by what vessels the removed particles escape, and where they are carried to.

174. Can any of this dead animal matter, thus carried by the system, be used a second time? If so, give reasons in support of your opinion.

APPENDIX H.

II. Lectures in Clonmel District Model School.

Dr. Clarke.

175. Give a brief account of secreting organs, from serous membranes to compound glands.

176. State the essential requisite for secreting organs, as judged of by its being found in *all*, even the simplest form, and name the two great divisions of glands as dependent on their structure.

177. What is the office of the "valvulæ conniventes?"

178. Mention the great divisions of the intestinal canal.

179. What is the office of the pancreas?

180. State the nature of the action by which residual food is transferred along the intestine.

181. Mention the form of the stomach in the ruminantia, and state the action of its several parts.

182. Do ruminant animals at any time, with any species of food, neglect their ordinary practice of rumination, and transfer the food directly to the fourth or true digesting stomach?

183. Is there any intimate relation between the mucous membrane of the stomach and the skin, in the human species?

184. What is the principal office of the skin?

185. How does it occur that in damp weather diarrhœa is more frequent than at any other time? Explain also, on the same principle, why exposure to cold produces the same derangement of the bowels.

186. Mention the general nature, and also the cause of the evils which result from each of the following errors in diet:—

Hasty and imperfect mastication.
Repletion by either solids or fluids.
Use of food too frequently.
Use of food mixed with too much stimulating condiments.
Use of hard and much salted meat.
Use of badly baked bread.

187. Why is light spongy bread more healthful than that which is but little porous.

188. Why is whole-meal bread more nutritive than pure white bread?

189. Will broth made from vegetables, or even with addition of bones boiled in a digester, afford a healthful diet?

190. In order to ascertain the amount of food necessary to support existence, should we consider the weight of the ordinary secretions and excretions so far as they are known?

191. State the combined weight of carbon, and other residual matters daily excreted by an adult man.

192. Is it desirable, in the outset of a weakening disease (such as fever usually is), to use strong aperient medicine (as is often done), and subsequently, throughout the disease, to neglect the condition of the bowels?

193. Mention a measure of precaution advisable when *symptoms* of fever are first experienced.

COMPARATIVE ANATOMY.

194. State the circumstances which would guide you in

determining from any one of the following bones, the nature of the animal to which it belonged :

Anterior part of the scapula.
Radius.
Phalanges.
Sternum.

195. State the opinion of Cuvier as to the mode of life of the fossil megatherium, and its general form, whilst only its fore-leg and foot were yet discovered. Give also the reason on which he founded that opinion.

196. From the form of the molar teeth, state that of the incisors, and particularly of the canine teeth.

197. Show why true molar teeth would be absolutely useless to an animal possessed of fully developed canine teeth.

198. Mention how the form of the condyle, or articulating surface of the lower jaw would guide you in determining the nature, mode of life, and general form of the animal which possessed it.

199. In what class of animals is the lower jaw not directly articulated, or jointed to the upper ? State also the object of that arrangement.

200. What is the relative position of the eyes in the hare, the bull, and the otter ? and state the reason of the difference found in each case, as connected with the disposition or habits of each animal ; also of the position of the external ear in the wolf, the hare, and the deer, with the probable cause.

201. Mention the general forms of the vertebræ in the mammalia, sauria, and fishes, respectively, and show the benefit of such knowledge, in determining the nature of an unknown animal, such as the fossil " icthiosaurus."

202. State the nature and habits of birds furnished with vertical projecting fibres at the sides of the bill.

203. Upon finding large nerves in the bill of a bird, what would you conclude as to its food ?

204. State the inference derivable from great size of the malar or cheek bones, as to the habits of an animal.

205. On finding the tongue of a bird long, sharp, and arrow pointed, to what order would you refer it, and what form of tail would you expect it to have ? Mention also the probable form of its bill.

206. Which of the mammalia does not possess a pelvis ?

207. State to which of the bones of the fore-arm is the hand articulated, and why it is so.

208. From what class of vertebrated animals are ribs absent, and in what class are they all joined together ?

209. Show the necessary relation between the presence of a canine tooth, and a fore foot furnished with phalanges.

210. State the structure of the fins of the whale, and show to what part of the body of other mammalia they correspond.

211. Of what service is the blubber of cetaceous animals to themselves during life, and to man after their death ?

APPENDIX H.

II. Lectures in Clonmel District Model School.

Mr. Clarke.

212. Where is the spermaceti chiefly deposited in the cachalot or spermaceti whale? Describe the shape of the containing part.

213. Given a solid foot, what would you predicate as to the animal that possessed it, with regard to teeth, stomach, length of intestinal canal, presence or absence of clavicle and horns, general form of body, and nature of food?

214. Name the essential characteristics of a hand.

215. Mention parts of the body used by many orders of mammalia as substitutes for the hand, and one which, used for this purpose, is a modification of the nose.

216 Mention the substitute for the hand, used by the chamelion, ant-eater, giraffe, and woodpecker.

217. Mention the members of certain insects which serve this purpose, also those used by certain mollusca for the same purpose.

218. Is there any relation between the length of the neck, and size and weight of the head? If so, give examples.

219. State the reason why a proboscis has been given to the elephant.

220. Since the thumb, with its adductor muscle, has been received as the essential characteristic of a hand, show that it is really as important as this selection implies, and also the obvious utility of the present form of the hand, particularly as to the varying length of the fingers.

221. Which of the bones, connected with the sternum, is invariably present in all animals which use the anterior extremity as a hand?

222. Mention the form of the stomach in the horse, and state whether this animal has been known to vomit; and if not state the probable reason why this action does not take place.

223, State the number of teeth in adult mammalia, mentioning the number of each kind; state also the reason of the last molars, or wisdom teeth, being so long deferred.

224. State the mode of development of teeth, and why the operation of lancing the gums, (as it is called,) is sometimes, during the period of dentition, highly advantageous.

225. Mention examples of organs used instead of teeth in birds and some fishes.

226. Describe the saw and sword fishes, and mention the object of the saw in the former.

227. State the general form of the teeth of carnivorous animals, also the mode of disposition of the enamel.

228. State the disposition of enamel in the incisor and molar teeth of the rodentia, mentioning also the form of each.

229. Mention the form and marking of the molar teeth in the Asiatic and African elephant, respectively.

230. Why are the bones in the limbs of the deer and horse placed so obliquely to each other; and why so nearly in a vertical position and straight line in the elephant?

231. In what respect does the vertebral column of a bird differ from that of the mammalia?

232. Is there any exception to the fact of birds not having

elastic cartilage between the dorsal vertebræ; and therefore in such cases having the latter movable, whereas they are usually immovable; If any, give example, and explain the probable cause.

233. If a bird be found possessing a flat sternum, what does this circumstance indicate as to its mode of life?

234. Why is the eye of a fish so much more convex than that of terrestrial animals?

235. Why have fishes no eyelids or lachrymal glands?

INSTANCES OF BENEFICENT DESIGN IN THE STRUCTURE AND GENERAL ARRANGEMENT OF ANIMAL BODIES.

236. State what coat of the aorta and other large arteries serves to maintain a *constant* flow of blood in these vessels, though the heart acts *alternately*, and show not merely the convenience of such a result, surpassing the results of air vessels, or three throw cranks in artificial pumping engines, but especially the fatal disease which this arrangement to a great extent prevents.

237. Show the design observable in the valves of great arteries (as the semi-lunars of the aorta and pulmonary artery) opening in the direction *from* the heart, whilst those of veins uniformly open towards that organ.

238. Mention the evidence of design in the structure of the muscular tissue of the heart.

239. Why are there valves in veins of the trunk and limbs of mammalia, and not in the veins or sinuses of the brain?

240. How comes it to pass that the valves of the human body continue in perfect action during an entire life, though called into play about seventy times per minute, whilst valves of the hardest mineral material, and of the highest artistic execution, could not last one-fiftieth part of that time?

241. Give the evidences of providential care in the constitution of bone, also in its shape, with relation to that found by art to be the strongest for any given quantity of matter, and to the direction of the force applied to by the muscles.

242. State the evident design of these projections on bones, anatomically called *processes*, and show by examples, that they are more prominent in proportion to the disadvantageous position of the muscle attached to them, as to the exertion of power, and also to the necessity for considerable power, as when large members are to be moved.

243. If the first or second order of levers was used instead of the third, could the present muscular system accomplish its object of giving sufficient motion to the members? Would they have power? Would they not lose, to a great extent, one essential element of momentum? Could they, under such circumstances, perform the simple act of driving a nail into a board?

244. Name the orders amongst the class mammalia to which a clavicle has been given; and show that it has been denied to the others, not only because that its possession

APPENDIX H.

II. Lectures in Clonmel District Model School.

Dr. Clarke.

would be useless to some, but particularly because that it would be injurious to others.

245. Show the evidence of design apparent in the form and structure of the human foot.

246. State the design of the intervertebral cartilages, and group together certain parts having a tendency to this same object.

247. Why are the tables of the skull of opposite qualities as to hardness, and what service arises from their difference of structure?

248. Is the position of standing one of repose? If not, state the reason.

249. State some of the various kinds of protection afforded to the nervous system of mammalia.

250. In what manner does the curved form of spine contribute to this end?

251. Show the guards or sentinels to some of the nerves of special sense.

252. State your opinion as to the causes of the sentient extremities of the nerves being distributed over the *surface* of the body, and also of the relative position of nerves and arteries in general, and of the cases in which this more usual distinction is departed from.

253. Point out the evidence of design in the distribution of lachrymal glands, to some animals, and denying them to others who could not need them, stating examples of each class.

254. Show the benefit resulting from the ganglionic nerves, and the vital organs dependent upon them, being unconnected with our will.

255. Show beneficent design in the barbed tongue of the woodpecker, the serrated middle claw of the cormorant and heron, and the notched bill of the solon goose.

256. What is the benefit of the form of foot given to the rein-deer and the camel? Mention the mode of life of each, and describe the peculiar stomach of the latter.

257. State a probable reason for certain animals being ruminant.

258. State the evidence of design in the fact, that the milk of mammalia contains a greater quantity of phosphate of lime during the first few weeks of the existence of the young animal for whose use it was intended, than it does at a later period; also mention a practical application of that principle in the selection of food for the young.

259. State the reason why the teeth of young mammalia are not developed at birth, as those of some other animals are.

260. Give an example of beneficent design in the arrangement of the valvulæ conniventes, also of inosculation of arteries.

III. HEAD INSPECTORS' REPORTS upon SCHOOLS Inspected during the year 1852.

No 1.—GENERAL REPORT of WILLIAM M'CREEDY, Esq., Head Inspector, on Schools inspected by him, in the year 1852.

Mr. M'Creedy.

Dublin, April, 1853.

GENTLEMEN,—The following is my General Report, on the ordinary National Schools, inspected by me during the past year, in the short interval remaining to me for that purpose, when not engaged with the other duties of my office. A separate report, on the usual printed form, was forwarded to the Board, on each school visited, as my inspection proceeded; and it is from the collected body of these reports, and from my notes taken at the time, that my present general statement of results, is derived.

Occupation of Time.—I have set down in the subjoined scheme, a brief summary of the occupation of my time for the year 1852; with the nature of the several duties I was required to undertake, and the number of days given to each:—

	DAYS.
Revising examination papers of 1851, and preparing those of 1852, with attendance at the office, . .	38
Travelling long distances, ...	19
Examining and classifying the Teachers (male and female) of 11 Districts, including the time given to their written exercises, and that occupied in drawing up official returns, ...	63
Special inquiries and reports thereon, . . .	17
Business connected with the Ballymena and Coleraine Model Schools, ...	31
Inspection of ordinary schools, and forwarding reports thereon, ...	70
Drawing up tabulated particulars of the examinations of 1852, as regards both schools and Teachers, and preparing General Reports on the same, . .	33
General correspondence with Teachers, Inspectors, and others, ...	16–287
Sundays and Holidays, ...	61
Off duty on leave, ...	18
	366

Schools Inspected.—In the interval of seventy days, allowed me from my other duties, I visited throughout the summer, and with but one or two exceptions, wholly in the county of Antrim, 100 of our ordinary schools, of which, however, 15, from various causes, not necessary to specify here, were closed at the time of my visit.

Of the remaining eighty-five, found in operation, eight, under masters, were attended by boys only; seven, under mistresses, by girls only; and seventy, three of which only were under mistresses, were what we call mixed schools—that is, schools attended by children of both sexes.

State of Attendance on Schools visited.—The following table

APPENDIX H.

III. Head Inspectors' Reports on Schools Inspected.

Mr. M'Creedy.

exhibits, in a condensed form, the state of attendance in the schools found open, as regards the daily average of their pupils, the numbers actually present on the days of inspection, and the numbers also enregistered at the same time on the Teacher's rolls.

	Boys. 8.	Girls. 7.	Mixed. 70.	Total. 85.
Number of Pupils on School Rolls at time of my inspection, . .	595	423	5,195	6,213
Average daily attendance of Pupils for 12 months preceding my inspection, ...	341	234	2,566	3,141
Number of children present on the day of my inspection, . .	339	266	2,835	3,440

Excluding the Poor Law Union Schools, and three others recently opened, I find in 81 ordinary schools, that the returns of attendance kept by the Teachers, who, I must in justice here acknowledge, are more attentive than formerly to this important duty, yield the following results :—

Average time spent by children at School, . . . 38 Months.
Average age at which they begin attendance, . (about) 5 Years.
Average age at which they leave off, . between 12 and 13 Years.

By comparing the figures in the foregoing table, it will be seen, that the number of pupils I saw present at the time of inspection,* was a good deal above the average attendance for the year, and not, as in 1851, one-fourth less ; while on the other hand, the average, as in the case of that returned for the schools reported on in 1851, and in the years preceding, is only a very little more than one-half the number found entered on the school rolls, on the days of my visit, being, to give it perfectly accurately, but 50·5 per cent. of this last ; and as compared with the average number on the rolls throughout the entire year, I find it to be no more than 51·8 per cent.—that is to say, that for every 100 pupils entered on the aver-

* I observe it has been supposed very generally, that our Teachers are previously informed of the times of our inspection ; for it has been argued that, as it is not on the occasion of an Inspector's visit that the pupils in general would be allowed to absent themselves, the numbers given as present at inspection, may be taken as a very liberal—meaning by that, I presume, an unduly favourable representation of the ordinary attendance. Now, this assumption is founded entirely upon mistake. The Head Inspector gives no previous notice of his intended visit ; on the contrary, it is his constant aim to enter the schools as unexpectedly as possible, in order that he may see them in their ordinary phase of character, and in their true working order. In England it is not so ; the Inspectors there invariably give notice, and hence their reports of attendance are comparatively favourable.—See *Minutes of Committee of Council on Education*, for 1839-40, pp. 22-28.

age on the rolls of these schools, but about 52 on the average actually attend.

In further illustration of the great fluctuation in the attendance at our schools, I have to add, that in those of the ordinary sort, inspected last year, while so many as 5,856 pupils were admitted, no less than 3,645 were struck off.

Mr. M'Creedy.

I may here notice, that in the case of 158 male schools, whose Masters I last year examined and classified, and from whom, though I did not inspect their schools, I obtained careful returns of the state of the attendance thereon, I find the average daily attendance for the year to be 53·5 per cent. of the average number on the rolls; and that in the case, again, of 65 Female Schools, whose Mistresses I also last year examined and classified, and from whom similarly I obtained like returns, the average daily attendance for the same period bears the somewhat higher proportion of 55·0 per cent. to the average number on the rolls.

From all of which, coupled with the details given in preceding years by my colleagues and myself, I think we may conclude generally that but a little more than one-half—say about 53 or 54 per cent.—of the children on the rolls of our ordinary schools, can be safely reckoned on, as likely to be found in actual attendance.

The poverty of parents, and no less—for the truth, at whatever cost, must be boldly pronounced—their lamentable indifference to the moral and intellectual improvement of their offspring, together with the early age at which children can now earn the wages of hired labour, may be taken, I think, as, if not the sole, at least the chief causes to which we are to attribute the irregularity of attendance in our schools,—and not, I should suppose a candid inquirer to allow, to anything peculiar in the general organization or internal economy, to which, as being *National*, they are necessarily conformed.

Of the three causes mentioned, we may observe, that while the last acts most in the manufacturing and most highly advanced agricultural districts, the other two, sad to say, are to be met with in greater or less strength almost everywhere; and hence we may see the folly of inferring, as some have done, from the presence or absence of one cause alone—say, for instance, the offer of profitable employment to children of tender age—what ought to be the comparative statistics in the matter of education of this or that particular county. In Down, Antrim, Armagh, and Derry, counties rich in manufactures and various other sources of remunerative industry, parents, we may suppose, are most tempted to sacrifice their children's education, by the ready sale they can make of their labour; but we should commit a very grave error indeed, were we rashly to conclude thence, that they avail themselves less than others of their countrymen of the means of instruction within their reach, for as they are comparatively free from the tyranny of want, the schools planted among them might still exhibit, as is the fact, a tolerable attendance,—while on the

Mr. M'Creedy.

other hand, in the counties of Tyrone, Donegal, Leitrim, and Sligo, where, it is but too true, little temptation is offered by manufacturing or other industry, to draw off the young from the benefits of instruction, but where yet the general poverty of the people is so great, as—coupled with their mental listlessness, a consequent, in my mind, of that same poverty—naturally to lead to, and fairly to account for, without the supposition of any other influence, a very low state of school attendance.

That to the causes I have here alluded to, and not to anything peculiar to or characteristic of our schools, may fairly, in the main, be assigned the lowness of their average attendance, we are warranted to infer from the fact, that in the schools connected with another of the educational institutions of our country, and of one, too, based upon very different, not to say opposite, principles from those acknowledged by the Board, it appears that of 103,878 children on their rolls, but 55,822 were found on the average in attendance,—that is to say, 53·7 per cent., or somewhat more than one-half.

This comparison is further valuable in proving, as I think it does most conclusively, that the returns of attendance, &c., made to the Board by our Managers and Teachers are, in general, fair and honest; and that we have no just ground or reason, as has been insinuated, to doubt their accuracy, or to suppose them peculiarly exaggerated.

Ages of Children.—As in former years the children found in attendance at the time of inspection were, for the most part, very young, and differed in this respect very little from those included in my returns of 1851, except, indeed, that I met last year with a still smaller proportion of pupils of the more advanced ages.

Of the 3,440 pupils present—

628	Boys and	572	Girls	were under 7	years of age.
273	,,	188	,,	were 7	,,
276	,,	201	,,	8	,,
211	,,	143	,,	9	,,
213	,,	127	,,	10	,,
125	,,	91	,,	11	,,
108	,,	54	,,	12	,,
59	,,	30	,,	13	,,
34	,,	25	,,	14	,,
60	,,	22	,,	15	,, and above.

From this it follows that above one-third were under 7 years of age; that about seven-elevenths were under 9 years of age; that about five-sixths were under 11; and that only 17·6 per cent. of the entire number were above 10 years of age. The average age of the 1,987 boys found present was, as nearly as possible, $8\frac{3}{5}$ years; and that of the 1,453 girls $7\frac{3}{5}$ years.

And here, inasmuch as this feature in our Schools—the extreme youth of a large proportion of the children attending them—has been much dwelt upon of late, as if telling with peculiar emphasis against the system administered by the Board, I may be permitted to refer, which I do in no invidious

spirit, to the educational statistics of the sister country, in order to show that the evil, which all must acknowledge to be very great, is not confined to Ireland; nor, much less, is it to be traced to any malign or faulty influence inherent in the constitution of Irish National Schools.

In Great Britain, then, a country favoured by the possession, in a proportion beyond almost any other, of all the elements of national grandeur, what, let me ask, in regard to the point in question, is the state of attendance in her primary Schools? Now, here is the answer.

By a return* just published by Sir James Kay Shuttleworth, on the faith of official documents furnished to him by Her Majesty's Inspectors of Schools, we find that in the case of 2,310 Schools, inspected in the year 1851 throughout England, Scotland, and Wales, and under every variety of denominational management, as *Free Church, Roman Catholic, Established Church of Scotland, Church of England, British, Wesleyan*, &c., the per centage of children of the several ages from 7 years and under to 14 years and above, both inclusive, as compared with the totals *on the books*, stood thus:—

7 years, and under,	34·22 per ct.	11 years, . .	9·36 per cent.
8 years, . .	14·94 ,,	12 ,, . .	7·19 ,,
9 ,, . .	14·09 ,,	13 ,, . .	4·12 ,,
10 ,, . .	12·73 ,,	14 ,, . .	3·35 ,,

It appears, therefore, that throughout the primary Schools of Great Britain above one-third of the children enrolled are not more than 7 years of age; that nearly one-half are under 9 years of age; that above three-fourths are under 11 years of age; and that 24 per cent. only of the whole number were above 10 years of age.

But this is for the whole kingdom. In large districts of country the returns are much more unfavourable; as in the counties of Chester, Salop, and Stafford, we are informed, by the same returns, that in 189 Schools inspected during the same period, nine-twentieths of the children on the books were not more than 7 years, while not less than four-fifths were under 11 years of age.

Indeed, to any one who is at all acquainted with the very valuable reports which have been published, from time to time, within the last twelve years, by Her Majesty's Inspectors of Schools in Great Britain, it must be perfectly familiar that there is almost no fact in connexion with the primary instruction of that country more strongly dwelt upon, or to which such striking prominence is given, as this very evil, now most strangely thought to be confined to our Schools, of the extreme youth of the pupils stated to be in attendance; and the very early age, therefore, at which it is to be supposed large numbers must be withdrawn from the benefits of education.

As acquaintance, however, with these most interesting

* See Shuttleworth's *Public Education*, page 427.

APPENDIX H.

III. Head Inspectors' Reports on Schools Inspected.

Mr. M'Creedy.

documents seems not to be very wide-spread, at least in our own country, I shall here take the liberty, by way of illustration, of referring more particularly to one or two of them. For this purpose I shall select the statements made by Messrs. Moseley and Watkins, two gentlemen whose reports are pre-eminently distinguished by fulness of matter and minute development of statistical details.

"Considering," says Mr. Moseley, "what is the amount of education which a child under the age of 12 years could receive, under the most favourable circumstances, and how far the education which the children in these Schools (inspected by him in 1848 and 1849) are receiving, falls short of that which, under more favourable circumstances, they might receive; and taking into my view that 95 *per cent. of them are actually under this age*, I cannot disguise from myself that, notwithstanding all the zealous efforts and great personal sacrifices of their promoters, *if all were equally good with these*,* and every locality were adequately provided with such Schools, the impression made would be neither great nor permanent.

"The early age," continues Mr. Moseley, "at which children are taken away from school is the *great*† discouragement of the friends of education; it is the *hopeless*† side of the question. No other obstacle appears to them altogether insurmountable but this."‡

Such is the testimony of Mr. Moseley; and here is the most striking, and equally trustworthy evidence of one of his most able and most distinguished colleagues:—

"I find, from the summary of my district," says Mr. Watkins, "that above 79 per cent. of all the children under education in it, at Church Schools, are *of and under the age of ten years;* in other words, four-fifths of my whole school population are of an age so tender, and capacity so limited, that there is great danger, on the one hand, of injuring their memories by premature overload, and on the other, absolute necessity to cram as much as possible into the little receptacle of their almost infantine minds during the very brief period that they are in the hands of the educator. It is simply true that the child of the rich man is going to school when the child of the poor man is leaving it. The education of the one is supposed to commence at the time that the education of the other is said to be finished.

"But," he continues, "the case of the children in these schools has not yet been fully stated. I find that the number of those of and under the age of seven years is just as great as of those of the ages of eight, nine, and ten years together. Nearly 40 per cent., that is, two-fifths of the whole number of children in the Schools, are of this almost infantine age of seven years and under, fit material for infant schools, and properly enough admitted there; but sufficiently out of place in the locality in which they are generally to be found, that is, in the lowest classes of the juvenile school, a burden to themselves, a hindrance to their school-fellows, and alternately a torment and a puzzle to the Teachers of the school. Again, in looking at the ages of the children in the ascending scale, we find a gradual but constant decrease as we approach the time of life when the faculties of the mind are beginning to expand, and the affections to seek objects on which they may rest in reverence and love."

The return is this:—

"Of the age of 11 years, rather more than 9 per cent.
Of the age of 12 years, rather more than 5 per cent.
Of the age of 13 years, rather more than 3 per cent.
Of the age of 14 years, a little more than 2 per cent.

* The italics here are not in the original.
† The italics here are Mr. Moseley's.
‡ See *Minutes of Council on Education* for 1848-9, pp. 3, 4.

"One might almost state it thus: that *about five children out of* 100 *of the poorer classes, stay at school to an age when they may learn something, and when their characters may be moulded into shape.*"*

If such, then, be the state of things in wealthy and prosperous England, and amidst a people distinguished among the foremost in the world, for energy and enterprise, can it be justly regarded as matter for indignant wonder and surprise, that in Ireland, our National Schools should be found attended by so small a proportion of children of the higher ages?

General Character of School-houses, Rooms, &c.—As regards the character of the houses in which they are held, the condition of their rooms and premises, and the supply of suitable furniture, such as forms, desks, &c., the 98 ordinary schools visited may be classed as follows:—

35 may be called fair or decent.
48 may be called tolerable or middling.
15 may be said to be poor or bad.

General state of efficiency of Schools.—And, again, as relates to the nature and extent of the instruction imparted, the order and discipline maintained, the proficiency of the pupils in their studies, and the general tone of management which pervades them, the following may be taken as a just classification of the 85 schools found in operation, and which I fully examined:—

35 are moderately fairly conducted.
24 are only tolerably conducted.
26 are poorly or indifferently conducted.

Proficiency of Pupils.—In all the 85 schools examined, besides reading, spelling and writing, arithmetic, to greater or less extent, is taught; and in—

81 is taught Grammar.	17 is taught Mensuration.
83 ,, ,, Geography.	15 ,, ,, Needle-work.
67 ,, ,, Dictation.	5 ,, ,, Music or singing.

This certainly looks very fair; and I am greatly gratified to be able to add that, with reference to the first three most important branches of instruction, in but a very small proportion of the schools included in the numbers given above, did I find, on actual examination, that what was professedly taught, turned out, as unfortunately, was too often the case in the year 1851, never, so far as the knowledge of the pupils was concerned, to have been really at all learnt. Thus, in 10 only of the schools in which Grammar was said to be taught, did the children fail altogether, to show some degree at least, of acquaintance with the subject; and in only 9 out of those professing geography, was a knowledge of the subject entirely wanting; while as regards dictation, there were but 5 schools where, when tested, the pupils acquitted themselves so ill that they could not be set down as able to perform the exercise with even tolerable accuracy.

* The italics are Mr. Watkins'. See *Minutes of Council on Education*, for 1850–51, p. 264.

Appendix H.

III. Head Inspectors' Reports on Schools Inspected.

Mr. M'Creedy.

Proficiency of Pupils.

Learning, as reported by Teachers.	No. of Boys.	No. of Girls.	Total.	Proportion per cent.	Proficiency, as ascertained by Inspector on actual examination.	No. of Boys.	No. of Girls.	Total.	Proportion to total No. of Children present in School.
First Book of Lessons,	710	664	1374	39·9	Able to read Second Book of Lessons correctly,	536	343	879	about 1 in 4
Second ,,	649	462	1111	32·2					
Third ,,	422	230	652	18·9	Able to read the Third and higher Books with ease and intelligence,	372	205	577	1 in 6
Fourth ,,	181	87	268	7·7					
Fifth ,,	25	10	35	1·0					
Grammar,	613	301	914	26·5	Acquainted with the parts of Speech,	222	131	353	1 in 9$\frac{1}{2}$
					Able to parse Syntactically,	105	29	134	1 in 25$\frac{3}{4}$
					Able to write with tolerable accuracy,	153	69	222	1 in 15$\frac{1}{2}$
Writing from Dictation,	313	138	451	13·1	Able to write with ease and correctness,	71	30	101	1 in 34
					Acquainted with outlines of Map of the World,	204	97	301	1 in 11$\frac{3}{4}$
					Acquainted with Maps of Europe and Ireland,	106	38	144	1 in 24
Geography,	768	374	1142	33·2	Acquainted with general course of Geography,	14	–	14	1 in 245
					Able to set down accurately any number of not more than seven places of figures,	159	68	227	1 in 15
Simple Rules of Arithmetic,	334	186	520	15·1					
Compound Rules,	127	86	215	6·1	Able to work correctly a sum in Subtraction,	178	72	250	1 in 13$\frac{4}{5}$
Proportion and above,	220	47	267	7·7	Able to solve with readiness and correctness questions in Practice,	93	16	109	1 in 31$\frac{1}{2}$
Writing on Slates,	315	238	553	16·0	Able to write on paper fairly,	286	154	440	1 in 7$\frac{3}{4}$
Writing on Paper,	649	323	972	28·2	Able to write a good hand with ease and freedom,	73	41	114	1 in 30

In the foregoing table I have brought together into one view the general results of my actual personal examination of the entire 3,440 children present in the schools on the days of my inspection, and by which it will be seen, that in every branch, except perhaps reading—where yet there is, too, a slight shade of improvement—there is a decided advance on the returns of the year 1851.

To enable you to judge fairly and impartially of the comparative value of the above results, and to form a just and an enlightened estimate of the degrees of proficiency in their several branches of learning attained by the pupils in our schools, I shall here take the liberty of directing your attention to the returns of a similar kind made by the English Inspectors, in regard to the children examined by them. This comparison, for many reasons interesting in itself, will further, I think, be so far useful, as clearly to prove, however confidently the opposite seems to have been assumed, that backward in many respects as our schools undoubtedly are, they are not on the whole—so far at least as the kind and degree of knowledge exhibited by their pupils are concerned—very much, if at all, behind schools of the same class to be found elsewhere, but the emoluments of whose teachers are yet, let it be recollected, some three-fold or four-fold greater.

The following is from Mr. Moseley (see *Minutes of Council on Education*, for 1844, p. 503).

"Out of 11,782 children contained in the schools inspected in the midland district, the knowledge of 5,805, does not extend beyond the letters of the alphabet and monosyllables, and 2,026 only can read the Scriptures with ease and correctness, being 1 in every 5.

"On a probable calculation, out of 100 children who leave the schools annually, 75 are unable to read the Word of God with ease and correctness, and 24 of these know only the letters of the alphabet and monosyllables; 50 of them have received no instruction whatever in penmanship, and 80 have not advanced in arithmetic as far as the compound rules, and that only 1 in 21 attains the Rule of Three."

In a subsequent year (see *Minutes of Council on Education*, for 1847-48, p. 5), the same gentleman reports that:—

"Out of 6,213 children examined in the southern district, 1,078, or only 1 in 5¾ could read the Bible with tolerable ease and correctness." (A result, however, which he acknowledges to have taken from the Teacher, and which might have become as he states, but 1 in 6 or 7, in the hands of the Inspector).

"Of the skill exhibited by the same children in arithmetic, he has no favourable impression to record. A little more than one-half were learning the first four simple rules, 1 in 10 had advanced to the compound rules, and 1 in 19 to Proportion. Very few, however, were able to write down correctly in figures, a number (ten thousand and ten), which I dictated to them;* and it is not often that I have succeeded in getting a sum of money correctly multiplied by a number of one figure.

Statements of a similar character, might be given from others of Mr. Moseley's reports, as well as from those of almost any one of his colleagues, but I shall content myself here with

* He adds, in a note, that he does not believe 1 child in 20 could write down this number.

APPENDIX H.

III. Head Inspectors' Reports on Schools Inspected.

Mr. M'Creedy.

transcribing a short summary drawn up by Mr. Watkins, a gentleman to whose reports I have already referred on another important point.

In regard to 21,075 pupils present in 235 schools, situate in the county of York, and inspected by him in the year 1851 he says there were :—*

"Learning Geography,	32·2	per cent.
Learning Grammar,	10·4	,,
Learning Fractions,	2·62	,,
Learning Compound Rules,	16·84	,,
Learning Division,	8·6	,,
Learning Addition,	21·9	,,
Learning to write from copies,	29·0	,,
Learning to write from dictation,	30·82	,,
Learning to read books of general information,	25·19	,,
Learning to read easy narrative,	35·4	,,
Learning letters and monosyllables,	39·24	,, ,,

To conclude, however, this ungracious, and, to the serious mind, very sombre matter, I may observe, that it can be only among those who are wholly unfamiliar with the educational literature of the times, that the impression could at all prevail, or for a moment be thought just, that our schools generally, as compared with others of the same class, are characterized to any exceptional degree, by the inferiority of their course of instruction ; and that in the case of men who have thoughtfully studied this great subject—the education of the people, what it is, and what it ought to be—there is hardly anything which could more shock their sense of fairness, than the judgments which have been of late passed upon our schools.

Who that has read the reports of Her Majesty's Inspectors, or the works recently published by such men as Doctor Hoppus, Richard Church, William Ellis, the Rev. Foster Zincke, or Sir James Kay Shuttleworth, or above all the publications of the Manchester Statistical Society, but must simply smile, if no sterner feeling arise within him, when he hears the strangely partial opinions, which are daily uttered upon this point ? I have thrown into a note,† a few extracts,

* See *Minutes of Council on Education* for 1851-52, p. 462.

† The London Statistical Society, having directed their attention to the state of education in the metropolis, report that of 1,154 Schools visited, 1,038 were under Mistresses, and only 116 under Masters, though the proportion of the girls taught was but as 6 to 5 of the boys ; that of 540 Teachers, there were 260 who, in connexion with their School, kept a shop, or took in washing or needlework, or the like, and many had their own household work to attend to, with the School ; that they were, for the most part, as might be conjectured, very indifferently qualified for their task; and that many thousands of children under them were receiving "a most inferior education." And this, be it remembered, in the capital of the civilized world.—*Statistical Journal*, August, 1843.

In the elaborate papers of the Manchester Statistical Society on the state of education in the towns of Bury, Salford, Manchester, Liverpool, and York, some of the examples which are adduced in illustration of the suitableness of the Teachers are truly laughable. "One School is kept by a blind man, who hears his scholars their lessons, and explains them with great simplicity ; he is, however, liable to

which, were they brought to the knowledge of our censurers, might, perhaps, make them pause before repeating their indignant comments on the faults and shortcomings of our poorly paid and ill-supported schools, whose Teachers on the average receive but a very little more than the ordinary wages of a common day labourer of our industrial towns and cities, and *many hundreds of whom are paid with much less.*

I trust, however, it will not for a moment be supposed that by anything I have here said I mean it to be understood that our Schools generally are in anything like a creditable state; or that, in any sense, or in any respect—whether as regards their outward material apparatus or their interior moral economy—they approach, by even a moderate interval, the condition one would desire to see them in; and which, it is to be hoped, notwithstanding all present discouragements, they will one day attain. No; for most assuredly I fully acknowledge

interruption in his academic labours, as his wife keeps a mangle, and he is obliged to turn it for her." "One master began to dilate on the various sciences with which he was familiar; and as he concluded, the visitor remarked—'This is *multum in parvo* indeed!' to which the master immediately replied, 'Yes, I teach that; you may put that down too.'"

"Much difficulty (*Liverpool Report*) was experienced in obtaining the numbers in some of the Dame Schools, from a notion prevalent among the mistresses that it is unlucky to count their scholars. One had conscientious scruples, and was deaf to persuasion, saying it would be flat flying in the face of Providence. 'No, no,' said she, 'you shan't catch me counting; see what a pretty mess David made of it when he counted the children of Israel.'"

"I could scarcely have believed," says Mr. Moseley, "on any other experience than my own, that some hundreds of children taken from the highest classes of our National Schools, should be incapable of telling me the *name of the country in which they live;* or, indeed, of attaching any definite idea to that question. I have examined many who are ignorant who governs this country—who did not know the name of the county in which their village was situated—who told me that England was in Africa—that to reach Scotland it is necessary to travel southward, and to cross the sea, and that the people there are black."

"One-third of the children who ought to be at school in Scotland," we are told by Sir J. K. Shuttleworth, "receive no public instruction; and that one-half the remainder are so taught by incompetent masters, that their education is almost fruitless. The condition of the great majority of the 'Adventure Schools' is an opprobrium to civilization."

"The schools of the higher classes of society," says the Rev. Benjamin Parsons, speaking of England, "have, in thousands of instances, been undeserving the name; the schools of the middle classes have been nearly as bad; and the *schools for the working portion of the people have too often been nothing better than a mockery.*"

"The state of the Schools for the upper grade of the working classes in our large towns (of England) is in many cases very deplorable."—*National Education*, by Rev. John Dufton.

"There is," says William Ellis, "among all, I believe, who are taking an active part in the diffusion and improvement of education, a common feeling of regret for the deficiency, both in quality and quantity, of the education accessible to the masses of the people, and also for the backwardness and inability of parents to avail themselves, in behalf of their children, of the indifferent education offered for their acceptance."

Mr. M'Creedy.

that our schools are far, very far, from what they ought to be; but while I admit this, I must still contend that, all things considered—the years of distress through which our country has just passed, and from the effects of which she continues still to suffer, the very general poverty of the parents of our pupils, the scanty and uncertain endowments of our Teachers, and the little countenance or encouragement shown them by the men of influence—from wealth or rank, in the localities where they labour—they are very little different from what might reasonably and fairly have been anticipated; and that, though they are yet far short of the goal towards which we would urge them, and to which, however slowly, they are certainly tending, they are already a long stretch from the point where the Board found them; while, unquestionably, allowances being made for difference of circumstances, they will be seen to contrast, except in the matter of emoluments, in no very unfavourable way with the ordinary primary schools of other countries.

Supply of Books.—Not less than 66 of the 85 schools, that is, above three-fourths, the same proportion as in 1851, were inadequately supplied with Lesson Books and other school requisites; and 15, or about one-sixth, had not purchased any within the twelve months preceding my visit.

The annexed shows the amounts purchased respectively by the three classes of schools in the year preceding my inspection:—

Amount of School Requisites Purchased for Sale to Pupils.

	£	s.	d.
Boys' Schools (8),	13	6	7
Girls' Schools (7),	1	11	8
Mixed Schools (70),	85	16	11
Total (85),	£100	15	2
Average amount for each School,	£1	3	8½
Average for each pupil, about	0	0	7

Payments of the Children.—In the following little Table I give the numbers of children entered on the rolls at the respective rates of payment adopted in our schools; and while by this we see that a less proportion than in 1851 are entered under the head "gratuitous," the numbers who are enrolled at the higher rates are still exceedingly small. Above one-half pay, or rather promise to pay, only a penny, or it may be but a halfpenny a week.

Number on the Rolls entered.	Boys, 8 Schools.	Girls, 7 Schools.	Mixed, 70 Schools.	Total, 85 Schools.
At and under 1*s.* 1*d.* per Quarter,	404	273	2,509	3,186
At rates not over 2*s.* 2*d.* per Quarter,	96	95	1,997	2,188
At rates not over 3*s.* 3*d.* per Quarter,	29	8	385	422
At rates not over 5*s.* per Quarter,	15	7	33	55
At rates over 5*s.* per Quarter,	–	–	7	7
As gratuitous,	51	40	264	355

Incomes of Teachers.—I subjoin, further, another short Table, in which are shown the sources and amount of the incomes of the Teachers of 83 of our Ordinary Schools, the two Poor Law Union Schools being left out, as belonging to a class apart. In this it will be observed that the income from local endowments is much less than that given for the schools inspected in the year 1851, and almost all of which were situated in Donegal, while the average amount derived from school fees is, for last year, considerably greater. The total average income from all sources connected with their Schools is also somewhat greater, a result owing, of course, in part, to the augmentation of salary granted, last year, to certain classes of our Teachers.

	Boys' School, 7 Teachers.	Girls' School, 7 Teachers.	Mixed School, 69 Teachers.	Total, 83 Teachers.	Average.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Income from School fees, .	60 10 0	25 10 0	508 0 0	594 0 0	7 3 1½
Income from local Endowments,	10 0 0	12 0 0	37 0 0	59 0 0	0 14 2¼
Salary from the Board, . .	155 0 0	127 0 0	1238 0 0	1520 0 0	18 6 3
Annual value of residences, .	4 0 0	–	22 0 0	26 0 0	0 6 3¼
Total income from Schools,	229 10 0	164 10 0	1805 0 0	2199 0 0	26 9 10
Income from sources apart from School,	42 0 0	–	104 10 0	146 10 0	1 15 2
Total income from all sources, .	271 10 0	164 10 0	1909 10 0	2345 10 0	28 5 0

Cost of Education per Pupil.—Setting aside the two Poor Law Union Schools, and taking into account that the average daily attendance on the above 83 Ordinary Schools was 3,358, and that to the amount entered for "salary from the Board," is to be added the sum of £79 paid to Monitors, Workmistresses, and Assistants, while to "school fees" an addition of £2 10s., for the same parties, is to be made, and to "local endowments" £25, it then will be seen to follow—

	Per Annum. s. d.
That the average amount of School Fees paid by the people for each pupil is . . .	3 6½
That the average payment made by the Board for each pupil is	9 6¼
That the average payment to the Teachers from all sources for each pupil is . .	13 8½
That the average payment to the Teachers from all *local* sources for each pupil is . .	4 2¼*

* This last item is double that which would seem to be paid, on the average, to our Ordinary Schools, taking them, one with another,

The first of the above items—the payment made by the people in fees—is one-half more than that returned in the year 1851, and the third item is one-eighth above the corresponding return of the same year.

Looking back, it will be observed that the average amount paid in fees to each of the 83 principal Teachers is £7 3*s.* 1½*d.*; and, including all local sources, the income of each, apart from the Board's salary, is £8 3*s.* 7*d.*

Moreover, in the case of 158 Male Schools, whose Masters I examined and classified last year, the return made of fees gives, on the average, £4 3*s.* 1*d.* for each; and the income derived from all local sources would appear to be, on the average for each, £5 2*s.*

And again, in the case of 65 Female Schools, whose Teachers I also examined and classified last year, the average return from fees is £4 8*s.* 9¾*d.*, and from all local sources about £5 17*s.* 9½*d.*

Further, by a return made by Mr. Butler for 463 Ordinary Schools,* whose Masters he examined in the year 1848, it would appear that the average income per School in fees alone was £5 15*s.*, and that the annual amount from all local sources, fees included, was so much as £9 12*s.* 2*d.* The payment in the same Schools was, in fees, for each pupil, 2*s.* 2½*d.*, and from all local sources, fees, &c., included, it amounted to 3*s.* 8½*d.*

Still more on this point, to show that the results I have arrived at are to be relied on, as at least not very wide of the truth, or much divergent from the ordinary mean of school receipts in the better sort of districts, I shall here take the liberty of referring to data otherwise obtained. According, then, to the General Statistics contained in the Commissioners' Report for the year 1851, it would seem that the annual payment made to our schools, from all local sources of whatever kind, fees and all else inclusive, except simply the Board's aid, is, on the average for the whole kingdom, but £5 2*s.* 11*d.* *for each.*

Arranged according to the provinces, the payments made to the schools, on the one hand, from the Board, and on the

throughout the entire country; for, according to the most accurate calculation I can make, it would appear, casting out of the account the Central and District Model Schools, and the Conventual and Poor Law Union and Prison Schools, that the average payment made to the Teachers of the Ordinary National Schools, for each pupil in average daily attendance educated in them is, from *all* local sources, not more than *two shillings* per annum, or something less than a halfpenny per week. The average payment per scholar in attendance, from local sources alone, is set down by Sir James Kay Shuttleworth, for 2,310 Schools in Great Britain, reported on in the year 1851, by Her Majesty's Inspectors, as not less than 17*s.* 5¼*d.* per annum, or about four pence per week.

* Mr. Butler's district in that year extended to the counties of Dublin, Wicklow, Wexford, Meath, Westmeath, Kildare, King's, Queen's, Waterford, Tipperary, Kilkenny, Carlow, Longford, Louth, Armagh, Monaghan, and Cavan.

other from all other sources, as shown by the returns of 1851, I find to stand thus :—

	Local Aid, per School.	Board's Aid, per School.	Total Income, per School.
	£ s. d.	£ s. d.	£ s. d.
Ulster, ...	5 18 0	16 1 5	21 19 5
Leinster, ...	5 11 10¼	16 1 5	21 13 3
Munster, ...	4 17 5	16 12 2½	21 9 7½
Connaught, . . .	2 7 0	14 15 1	17 2 1
Average for Ireland, .	5 2 11	16 0 8	21 3 7

As the payments vary very much even in the same province, I have drawn up the subjoined Table, in which the counties are set down according to the amount of local contributions paid their schools, placing those first in order whose receipts, from local sources, are highest:—

	County.	Local Aid, per School.	Board's Aid, per School.	Total Income, per School.
		£ s. d.	£ s. d.	£ s. d.
1	Down, ...	9 16 9	16 7 6	26 4 3
2	*Limerick, . . .	9 14 0	16 8 6	26 2 6
3	Dublin, . . .	9 6 0	18 14 11	28 0 11
4	Antrim, . . .	9 3 7	16 11 4	25 14 11
5	Wicklow, . . .	7 4 5	15 10 1	22 14 6
6	Londonderry, . .	7 2 0	16 5 7	23 7 7
7	Kildare, . . .	6 11 10	15 12 8	22 4 6
8	Armagh, . . .	6 7 0	16 1 3	22 8 3
9	Waterford, . . .	6 6 2½	18 2 0	24 8 2½
10	Louth, . . .	6 6 0	18 0 2	24 6 2
11	Meath, ...	5 14 8	15 11 3	21 5 11
12	Kilkenny, . . .	5 4 7	16 8 11	21 13 6
13	Wexford, . . .	5 4 7	14 17 8	20 2 3
14	Tipperary, . . .	4 16 0	16 10 11	21 6 11
15	Queen's, . . .	4 13 2	16 12 9	20 5 11
16	Cork, ...	4 10 5	16 18 2	21 8 7
17	King's, ...	4 1 5	14 11 8	18 13 1
18	Donegal, . . .	3 18 8	15 16 6	19 15 2
19	Westmeath, . . .	3 18 0	14 5 3	18 3 3
20	Tyrone, . . .	3 16 8	16 0 3	19 16 11
21	Monaghan, . . .	3 13 2	16 18 3	20 11 5
22	Carlow, . . .	3 6 1	18 10 9	21 16 10
23	Sligo, ...	3 4 11	16 3 10	19 8 9
24	Clare, ...	3 2 8	15 4 7	18 7 3
25	Kerry, ...	3 2 2	15 15 2	18 17 4
26	Leitrim, . . .	2 14 2	15 12 11	18 7 1
27	Fermanagh, . . .	2 11 9	15 4 3	17 16 0
28	Roscommon, . . .	2 6 0	15 7 9	17 13 9
29	Galway, . . .	2 4 9	15 9 2	17 13 11
30	Cavan, ...	2 1 7	14 1 8	16 3 3
31	Mayo, ...	1 14 2	12 6 0	14 0 2
32	Longford, . . .	1 11 5	12 17 9	14 9 2

* The high place taken by Limerick is owing to the large receipts returned by its Convent Schools; these apart, its average for the

APPENDIX H.

III. Head Inspectors' Reports on Schools Inspected.

Mr. M'Creedy.

As a slight augmentation has been granted in the way of salary to certain classes of our teachers since the returns on which the foregoing table has been made have been obtained, a small addition ought to be made in each item under the heads of "Board's Aid" and "Total Income," in order to bring the above into closer agreement with the present state of facts.

Some correction, also, but of a very trifling amount, would be required on the ground that while in each county there are included some Poor Law Union Schools, and occasionally a Prison or a District Model School, there is no value set upon the sums obtained by such schools, whether from the Board or local sources. My divisor, therefore, has been sometimes too great, by some two or three units, and my dividend, by some few pounds, too small. But the increment, such correction made, that would thus accrue to the averages set forth, would be by no means important.

On the other hand, it is to be remembered that scattered throughout our schools are some 800 or 1,000 Assistants, Monitors, and Workmistresses, whose salaries from the Board and receipts from local sources, whatever they may amount to, have entered into the sums accredited to their respective schools, and on which the above averages have been calculated.

All corrections and allowances, however, on the one side and the other, being fully made, I do believe that the total average income of the principal Teachers, Masters and Mistresses, excluding Assistants, of our ordinary National Schools, is for the entire country not more than, if it be even so much, as £20 per annum.

What, then, must be the miserable pittances on which hundreds of our teachers, male and female, in our less favoured counties, as Fermanagh, Cavan, Leitrim, Mayo, and Longford, are doomed to wear away their lives in the discharge of their humble, but useful, however sadly ill-requited, labours?

And, now, let me ask, what great amount of proficiency can be fairly looked for or reasonably expected from the pupils of teachers so paid and so supported?—pupils, it is to be presumed, as unfavoured by fortune as their instructors, being, no doubt, ill clad, ill fed, and, in every domestic and social relation, ill nurtured; and so—I think, the truly good and wise (and wise because good)* would willingly allow—offering no very rich or hopeful soil for the culture of the intellectual husbandman; or one from which even the most skilful practitioner in the "georgics of the mind," though aided by all

ordinary National Schools within it would appear about the same as that set down for Louth.

* "If," says Henry Taylor, "there be in the character not only sense and soundness, but virtue of a high order, then, however little appearance there may be of *talent*, a certain portion of *wisdom* may be relied upon almost implicitly. For the correspondencies of wisdom and goodness are manifold; and that they will accompany each other is to be inferred, not only because men's wisdom makes them good, but also because their goodness makes them wise."—*The Statesman*, p. 30.

appliances and means to boot, could promise himself aught but a scanty harvest.

Discipline, Cleanliness, and Observance of Rules.—In almost all the schools I examined the discipline and order maintained seemed pretty fair, and the children, for the most part, appeared clean and tidy; while, with very few exceptions, indeed, I found the school-rooms and premises preserved in as fair a state of cleanliness and neatness as their material conditions would permit. Religious instruction is given to the pupils in all the schools I visited; and to this purpose Saturday generally is entirely set apart, together with either the first or last school-hour of each of the five remaining week-days. I met with no complaint from parents or others of any attempt on the part of the teachers to interfere or tamper with the faith of any of their pupils; nor, indeed, I may add, have I ever met with an authenticated case of such interference.

To what extent attendance at our Schools is mixed.—My attention having, for the first time, been directed last year to the question of mixed attendance at our schools, I may be permitted here, before closing this report, to submit the results of my inquiries on that head; and which, if I mistake not, will go far to remove some very erroneous impressions which are pretty generally entertained in regard to our schools. Before doing so, however, I beg to notice one or two facts which it is necessary to bear in mind, in order that we may arrive at a right conclusion on the point referred to.

And, first, I would observe, that as it happens in regard to the whole kingdom, that while its aggregate population is, in a religious point of view, largely mixed, there are large tracts of country very little so; just in the same way, as is well known to every one acquainted with the topography of our land, it happens with regard to our very smallest territorial divisions. Thus, for example, in counties the most mixed, as Antrim, Down, and Londonderry, there are whole stripes or belts marked by the great predominance of one particular denomination; and even conterminous townlands are sometimes met with in one of which, perhaps, not a single Roman Catholic family is to be found, and in the other not one Protestant. In such localities, I need hardly remark, it would be as unreasonable to expect our teachers to attract a largely-mixed attendance to their schools, as to hope to draw sweet-milk, and not salt water, from the sea.

In the second place, it is to be recollected that our schools, instead of being in all cases on purely neutral ground, have, many of them, owing to the early opposition of our landed proprietors, been established on the only sites at the time available to their local patrons, as on church, chapel, or meeting-house yards; and where, consequently, they are surrounded with circumstances which are peculiarly calculated to give them, in the minds of the people, an exclusive or one-sided character; and, in so far as such a prejudice may be

Mr. M'Creedy.

supposed to operate, to restrict attendance on them pretty much to one denomination.

In the third place, it is to be taken into account, that our schools have still to encounter a great amount of hostility on religious and other grounds, at the hands not only of clergymen—and these not of one denomination alone—but of many in that powerful and influential class, the landed aristocracy or country gentry.

Notwithstanding, however, the operation of these and other disturbing causes, as they may be called, it will be seen, I think, from the returns which I have brought together, and which I here subjoin, that our Schools are, at least in the North, very fairly mixed, in regard to their pupils. They are so, I believe, in almost every case where the population, for whose children they are established, is itself mixed, and where strong measures are not resorted to for the express object of preventing such a result.

To begin with District No. 4, which lies wholly in the County of Antrim: I examined last summer 76 out of a total of about 120 ordinary National Schools on the Inspector's list, and of these 76 I found not less than 54 at each of which the attendance of pupils was *fairly mixed*, embracing the children of Roman Catholics, and those of the leading Protestant denominations—.

And of the 54 Schools whose attendance was so mixed there were:—

3 erected in Meeting-house (Presbyterian Church) ground.
3 erected in Chapel-yard ground.

7 whose Teachers were Roman Catholics, and whose Managers were Presbyterians.
3 whose Teachers were Roman Catholics, and whose Managers were of the Established Church.
1 whose Teacher was a Presbyterian, and whose Manager was of the Established Church.
5 whose Teachers were of the Established Church, and whose Managers were Presbyterians.

In District No. 1, whose official centre is Letterkenny, and all whose schools are in the County Donegal, I observe that of 91 schools of which I have obtained returns from the Inspector—

There were 65 whose attendance was fairly mixed :—

4 of which were on Meeting-house ground.
1 of which was on Chapel ground.

3 whose Teachers were Roman Catholics, and whose Managers were Presbyterians.
1 whose Teacher was of the Established Church, and whose Manager was Presbyterian.
4 whose Teachers were Roman Catholics, and whose Managers were of the Established Church.
7 whose Teachers were Presbyterians, and whose Managers were of the Established Church.

In District No. 2, whose official centre is the city of Londonderry, and whose schools lie partly in the county of Londonderry, and partly in the county of Donegal, I have obtained returns from the Inspector of 100 schools, and of these—

There were 62 whose attendance was fairly mixed:—

4 of which were on Meeting-house ground.
4 of which were on Chapel ground.
2 of which were on Established Church ground.

1 whose Teacher was a Roman Catholic, and whose Manager was a Presbyterian.
1 whose Teacher was of the Established Church and whose Manager was a Presbyterian.
6 whose Teachers were Roman Catholics, and whose Managers were of the Established Church.
10 whose Teachers were Presbyterians, and whose Managers were of the Established Church.

In District No. 3, whose official centre is Coleraine, and whose schools lie in the counties of Antrim and Londonderry, I have obtained returns from the Inspector of 89 schools, and of these—

There were 67 whose attendance was fairly mixed :—

3 of which were on Meeting-house ground.
1 of which was on Chapel ground.

8 whose Teachers were Roman Catholics, and whose Managers were Presbyterians.
1 whose Teacher was of the Established Church, and whose Manager was a Presbyterian.
6 whose Teachers were Roman Catholics, and Managers of the Established Church.
7 whose Teachers were Presbyterians, and Managers of the Established Church.
1 whose Teacher was a Presbyterian, and Manager a Roman Catholic.

In District No. 5, whose official centre is Belfast, and whose schools lie wholly in Antrim, I have obtained very full and minute returns of 133 schools, and of these—

There were 84 whose attendance was fairly mixed:—

10 of which were on Meeting-house ground.
1 of which was on Established Church ground.

3 whose Teachers were Roman Catholics, and Managers Presbyterians.
4 whose Teachers were of the Established Church, and Managers Presbyterians.
2 whose Teachers were Roman Catholics, and Managers of the Established Church.
9 whose Teachers were Presbyterians, and Managers of the Established Church.

2 under the joint management of Presbyterians and members of the Established Church.
2 whose managing Committees are of all denominations.

Mr. M'Creedy.

In District No. 6, whose official centre is Newtownstewart, and whose schools lie in the counties of Londonderry and Tyrone, I find that of 104 schools of which returns have been furnished me by the Inspector—

There were 79 whose attendance was fairly mixed:—

3 of which were on Meeting-house ground.
6 of which were on Chapel ground.

9 whose Teachers were Roman Catholics, and Managers Presbyterians.
5 whose Teachers were of the Established Church, and Managers Presbyterians.
5 whose Teachers were Roman Catholics, and Managers of the Established Church.
2 whose Teachers were Presbyterians, and Managers of the Established Church.
1 whose Teacher was of the Established Church, and Manager a Roman Catholic.

In District No. 7, whose official centre is Omagh, and whose schools are scattered through Fermanagh and Tyrone, I find that out of 75 schools, about which I have obtained the necessary return—

There were 66 whose attendance was fairly mixed:—

3 of which were on Meeting-house ground.
1 of which was on Chapel ground.

6 whose Teachers were Roman Catholics, and Managers Presbyterians.
4 whose Teachers were of the Established Church, and Managers Presbyterians.
9 whose Teachers were Roman Catholics, and Managers of the Established Church.

In District No. 8, whose official centre is the town of Donegal, and whose schools extend through the counties of Tyrone and Donegal, it would appear from the returns furnished me by the Inspector for 90 of his schools—

There were 48 whose attendance was fairly mixed:—

1 of which was on Meeting-house ground.

7 whose Teachers were Roman Catholics, and Managers of the Established Church.
8 of which were under the joint management of Protestants and Roman Catholics.

In District No. 9 whose official centre is Manorhamilton, and whose schools extend through the counties of Cavan, Fermanagh, Leitrim, and Sligo, it appears from the returns of the Inspector, that out of 122 schools visited by him—

There were 43 whose attendance was fairly mixed:—

1 of which was on Meeting-house ground.
1 of which was on Chapel ground.

19 whose Teachers were Roman Catholics, and Managers of the Established Church.
4 of which also were under the joint management of Protestants and Roman Catholics.

In District No. 10, again, whose official centre is Lisnaskea, and whose schools lie in the counties of Fermanagh and Tyrone, I have had returns of 126 visited by the Inspector, and of these—

There were 116 whose attendance was fairly mixed:—

3 of which were on Meeting-house ground.
8 of which were on Chapel ground.

7 whose Teachers were Roman Catholics, and Managers Presbyterians.
3 whose Teachers were of the Established Church, and Managers Presbyterians.
15 whose Teachers were Roman Catholics, and Managers of the Established Church.
2 whose Teachers were Presbyterians, and Managers of the Established Church.
2 also under the joint management of Protestants and Roman Catholics.

Lastly, in District No. 11, whose official centre is Dungannon, and whose schools extend through Tyrone, Armagh, and Down, out of 89 schools, about which I have obtained returns from the Inspector—

There were 71 whose attendance was fairly mixed :—

6 of which were on Meeting-house ground.
17 of which were on Chapel ground.

2 whose Teachers were Roman Catholics, and Managers Presbyterians.
4 whose Teachers were of the Established Church, and Managers Presbyterians.
5 whose Teachers were Roman Catholics, and Managers of the Established Church.
7 whose Teachers were Presbyterians, and Managers of the Established Church.
1 school under joint management of Protestant and Roman Catholic.

From the preceding returns, then, it follows, that out of 1,095 schools—scattered through all parts of the eleven Districts with which last year I was connected, and regarding which I have either myself, or through their respective Inspectors, obtained full particulars, on which perfect reliance can be placed—there were not less than 755, or more than two-thirds, at all of which the attendance of pupils, as regards their religious denominations, was *fairly mixed*; and this, let it be well observed, *notwithstanding* that many of them are so circumstanced, in regard to their site, &c., that, in their case, men who do not know our rural population would have thought the opposite result but too natural not to be realized in fact. I have further to remark, that of the 340 schools not set down as having a "mixed attendance," there are many I might truly enough have designated as such, had I so chosen, as pupils of the three leading denominations are to be found in them, though in very unequal proportion in relation to one another; but I resolved to reject all doubtful cases, or cases where the mixture was not of reasonable amount as compared with that of the surrounding population; and, accordingly, I

APPENDIX H.

III. Head Inspectors' Reports on Schools Inspected.

Mr. M'Creedy.

have not included in the above returns of "mixed schools" any whose attendance may not be taken as fairly reflecting the different religious denominations of the people among whom they are placed, and for whose benefit they have been established. I hope, therefore, that it will no longer be said, that while in the aggregate, or total attendance, for the National Schools of the entire kingdom, there would appear to be a mixture of denominations, such mixture is not to be found in *individual schools*—which have been confidently stated to be exclusively Roman Catholic, or exclusively Protestant—but only in the whole body of schools taken together. That such an assertion is unfounded, I have, I presume, made clearly appear, and it should now, I think, be fairly acknowledged as unwarranted by facts.

I have the honour to remain, Gentlemen, your obedient servant,

WILLIAM M'CREEDY, Head Inspector.

The Secretaries.

Mr. Butler.

No. 2.—REPORT upon the KYLE PARK MODEL AGRICULTURAL SCHOOL, by EDWARD BUTLER, Esq., A.M., Head Inspector of National Schools.

April, 1853.

GENTLEMEN,—I beg to transmit to you the following report upon the Kyle Park Model Agricultural School, which is now conducted under the exclusive control of the Commissioners.

Origin and Object of the School.—This establishment, situated about two miles from the small town of Borrisokane, was originally designed by Mr. Stoney, of Kyle Park, for an agricultural School, in which practical instruction in agriculture was to be united with the usual literary business of ordinary National Schools. It was to consist of a school-room for 90 children, a residence for the Teacher, and farm buildings. A farm of six Irish acres was to be annexed, to be cultivated under Mr. Stoney's management and direction, and under the superintendence of a skilful Agriculturist, whose salary was to be defrayed by the Committee of the Borrisokane Loan Fund Society. An annual rent of £1 per acre was to be charged for the land, which was to be paid out of the proceeds of the farm, and the surplus applied to the use of the school generally. The works on the farm, it was intended, should be carried on by a senior class of boys, who, in return for their labour, were to receive from the Agriculturist instruction in the improved system of agriculture. The estimated cost for the school-house, fittings, &c., was £300, and towards this sum the Commissioners awarded £200 on the usual conditions, the buildings, &c., being vested in trustees on a lease of three lives or 31 years. But, in consequence of alterations and additions to the first plan, the actual cost of the building was £800, of which sum

TABULATED PARTICULARS of SCHOOLS, reported on in the year 1852, by WILLIAM M'CREEDY, Head Inspector.

MIXED SCHOOLS.

| County | Name of School. | Date of Inspection. | No. of Schools visited. | No. on Rolls at time of Inspection. | Average daily attendance during the year. | Proportion per cent. of average attendance to number on the Rolls throughout the year. | | Number present. | Of the Children present there were: Not over 6 years. | 7 years. | 8 years. | 9 years. | 10 years. | 11 years. | 12 years. | 13 years. | 14 years. | 15 years and above. | Average age. | Average time children remain at School. | Average age at which pupils begin to attend School. | Average age at which they leave School. | Number of Children present returned by Teacher as learning: First Book. | Second Book. | Third Book. | Fourth Book. | Fifth Book. | Grammar. | Dictation. | Geography. | Arithmetical Tables. | Simple Rules. | Compound Rules and Reduction. | Proportion and above. | Mental Arithmetic. | Mensuration or Needlework. | Book-keeping. | Writing on Slates. | Writing on Paper. | Music. | Number of those present found on Examination able: To read Second Book correctly. | To read higher books with ease & intelligence. | To distinguish the parts of Speech. | To parse. | To write from dictation with tolerable accuracy. | To write from dictation with ease & correctness. | To trace the Maps of Europe and Ireland. | To answer on General course of Geography. | To answer on Map of the World. | To write numbers of not more than 7 digits. | To work Subtraction correctly and readily. | To work questions in Practice and Simple Interest correctly. | To write fairly. | To write a good hand with ease and freedom. | Is the supply of Books and Requisites sufficient? | School accommodation for | Number of Children on the Rolls entered: To pay not over 1s. 1d. | To pay not over 2s. 2d. | To pay not over 3s. 3d. | To pay not over 5s. | To pay over 5s. | As gratuitous. | Number admitted during the year. | Number struck off during the year. | Amount of School Requisites bought during the year. £ s. d. | Amount of fees received during the year. £ s. d. | Local contributions, not School fees. £ s. d. |
|---|---|---

| Average age. | Average time children remain at School. | Average age at which pupils begin to attend School. | Average age at which they leave School. | Number of Children present returned by Teacher as learning. | | | | | | | | | | | | | | | | Number of those present found on Examination able | | | | | | | | | | | | | | | |

| Name of School. | Date of Inspection. | No. of Schools visited. | No. on Rolls at time of Inspection. | Average daily attendance during the year. | Proportion per cent. of average attendance to average number on the Rolls throughout the year. | | Number present. | Of the Children present there were: Not over 6 years. | 7 years. | 8 years. | 9 years. | 10 years. | 11 years. | 12 years. | 13 years. | 14 years. | 15 years and above. | Average age. | Average time children remain at School. | Average age at which pupils begin to attend School. | Average age at which they leave School. | Number of Children present returned by Teacher as learning: First Book. | Second Book. | Third Book. | Fourth Book. | Fifth Book. | Grammar. | Dictation. | Geography. | Arithmetical Tables. | Simple Rules. | Compound Rules and Reduction. | Proportion and above. | Mental Arithmetic. | Mensuration or Needlework. | Book-keeping. | Writing on Slates. | Writing on Paper. | Music. | Number of those present found on Examination able: To read Second Book correctly. | To read higher books with ease & intelligence. | To distinguish the parts of Speech. | To parse. | To write from dictation with tolerable accuracy. | To write from dictation with ease & correctness. | To answer on Map of the World. | To trace the Maps of Europe and Ireland. | To answer on general course of Geography. | To write numbers of not more than 7 digits. | To work Subtraction correctly and readily. | To work questions in Practice and Fractions and Decimals. | To write fairly. | To write a good hand with ease and freedom. | Is the supply of Books and Requisites sufficient? | School accommodation for | Number of Children on the Rolls entered: To pay not over 1s. 1d. | To pay not over 2s. 3d. | To pay not over 3s. 3d. | To pay not over 5s. | To pay over 5s. | As gratuitous. | Number admitted during the year. | Number struck off during the year. | Amount of School Requisites bought during the year. | Amount of School fees received during the year. | Local contributions, not School fees. |
|---|---|---

BOYS' SCHOOLS.

GIRLS' SCHOOLS.

* Closed at time of visit. † Monitor. ‡ Workmistress.

three-fourths was contributed by the local parties, and £200 by the Board. Subsequently, the premises having been assigned to the Commissioners in their corporate capacity, at a rent of £32 a-year, a further sum of £380 was expended by them in 1849.

The school was opened in 1845, and in their Report for 1847, the Commissioners refer to it in the following terms :—

"The Model Agricultural School at Kyle Park, in the county of Tipperary, which was erected some years ago at an expense of £600 and upwards, towards which we made a grant of £200, has, from various causes, not succeeded under local management. Being desirous that this school should have a further trial, under our own control, and that agricultural instruction should be thereby afforded to the labouring classes in that part of Ireland, we have taken the land and premises at a moderate rent, upon lease. This establishment being now vested in ourselves, and conducted under our direction, we have appointed a Teacher, trained at our Model Farm, who superintends both the agricultural and literary departments. Not having any local aid to assist him in cultivating the farm, we have supplied him with the means, to a moderate amount, of providing stock, the cost of which he will be required to repay. We shall state in our Report of next year the result of this experiment."

The following is the statement contained in the Report for 1848 :—

"In order to carry out more effectually our object in establishing the Model Agricultural School at Kyle Park, in the county of Tipperary, which is the only one conducted under our exclusive management, we have deemed it expedient to increase the size of the farm, and to appoint separate Teachers, one to conduct the agricultural, and the other the literary department."

No reference having since been made to the working of the institution, except as regards the farm proceedings, of which an account, drawn up by the Agriculturist, is inserted in the Appendix to the Report for 1850, the details I am here giving will not, I trust, prove uninteresting.

School-house.—The school-house, in its present state, consists of two school-rooms—one for boys on the ground floor, and one for girls above it; two dormitories, intended for eight and six agricultural boarders respectively; a small sitting room, a bed room, and kitchen with loft for servant overhead, intended for the use of the Literary Teacher; and similar accommodation for the Agriculturist.

The school-rooms are each 30 feet long by 18 in width and 12 in height, and will accommodate about sixty children, allowing 120 cubic feet for each child; they are well lighted and ventilated, and suitably furnished with desks and seats, presses, maps, tablets, &c.

The dormitories are, in my opinion, much too low and confined, and quite inadequate for the proposed number of boarders; they are little more than 6 feet high in the centre for a breadth of 6 feet, and at the sides the height is only 3 feet; the larger of the two is 24 feet long, the smaller 20 feet, and both are 14½ feet in breadth.

APPENDIX H.

III. Head Inspectors' Reports on Schools Inspected.

Mr. Butler.

The kitchen lofts for the servants are also wholly unsuitable, as they are neither ceiled, nor ventilated, nor fitted up.

It is much to be regretted that, when the premises were first laid out, no provision was made for play-grounds.

Teachers.—The literary department consists of a Boys' and a Girls' School; the latter is conducted by the wife of the Master; and he, in addition to his duties in the Day-School, is required to devote an hour and a-half in the evening, to the instruction of the agricultural boarders in the usual elementary branches, and also in algebra, geometry, mensuration, &c. The Teachers entered upon their duties in January, 1851, and have since discharged them with zeal and diligence, and appear to have given satisfaction to all parties connected with the School. Both have been employed for many years under the Board, and have raised themselves by their excellent conduct, as also by their literary attainments, to the high rank they now hold among the National Teachers. The Master has been 19 years under the Board, and his wife upwards of 13; both were taught in National Schools, and trained in the Commissioners' Training Establishment in Dublin. They are Roman Catholics.

Salaries.—By the terms of their appointment, they are to receive the salary they are entitled to by their classification, the fees paid by the Scholars, and an allowance of £10 a-year to the Master, and £7 10*s.* to the Mistress, which the Commissioners, as Managers of the School, grant to them, in lieu of local endowment. They are, besides, provided with a furnished residence, and a rood of ground for garden purposes.

The fees received from the boys amounted, in 1851, to £4, nearly; and, in 1852, to £5; and the payments from the girls were, for the same periods, £3 and £2 12*s.*, respectively. The Master's emoluments, therefore, may be set down at about £50 per annum, and those of the Mistress at £32.

Fees.—The rates which the children are expected to pay are either 1*d.* per week, or 2*s.* 6*d.* or 5*s.* per quarter; but in the case of some of the children, these rates are only nominal.

Of those on the rolls last December there were entered—

At 1*d.* per week, .	24 boys and	29 girls.	Total,	53
At 2*s.* 6*d.* per quarter,	4 ,,	1 ,,	,,	5
At 5*s.* 0*d.* ,,	3 ,,	2 ,,	,,	5
	31	32		63

Besides these, 23 boys and 18 girls were admitted gratuitously by the Teachers.

Attendance.—The School is not favourably placed, to command either a large or a regular attendance. It is situated in a district of country by no means populous, and has on one side an extensive bog, which is impassable except in summer, and on the other a large farm of several hundred acres. Many of the pupils, girls as well as boys, come a distance of three miles and upwards. With the exception of the months of

May, June, and July, when the daily attendance of boys averaged 39, and that of girls 37, the numbers daily present did not exceed, on an average, 30 boys, and 27 girls; the average number on the rolls throughout the year being 66 boys and 75 girls.

In the Boys' School, 86 names were entered on the books during the year; of these, 27 were re-admissions. 81 names were struck off in the same period.

In the Girls' School, 89 names were registered, of which 37 were re-admissions; and 131 names were struck off.

A great proportion of these removals were caused by the non-attendance of the children; 4 boys and 14 girls emigrated; 1 boy went to business; 6 girls became servants, and 3 dressmakers.

Ages.—The average age of the 54 boys was 10¾, and of the 50 girls, 11 years, the number of children of each age being as below:—

3	boys and	2	girls were	5	years old.
4	,,	1	,,	6	,,
6	,,	4	,,	7	,,
5	,,	6	,,	8	,,
3	,,	2	,,	9	,,
4	,,	8	,,	10	,,
5	,,	2	,,	11	,,
6	,,	12	,,	12	,,
3	,,	6	,,	13	,,
7	,,	2	,,	14	,,
2	,,	–	,,	15	,,
3	,,	1	,,	16	,,
2	,,	1	,,	17	,,
1	,,	3	,,	18	,,

Occupations of Parents.—The following Table shows the class of persons who send their children to the School, and the number of children belonging to each trade or occupation:—

	Boys.	Girls.		Boys.	Girls.
Blacksmith,	1	2	Landed Proprietor,	2	–
Carpenter,	1	1	Policeman,	1	–
Cottier,	3	3	Shepherd,	1	1
Farmer,	21	18	Shoemaker,	3	–
Gardener,	1	–	Shopkeeper,	–	1
Labourer,	12	23	Teacher,	2	1
Land Steward,	6	–			

The majority of the children, as will be seen, are of the farming or labouring class, whom schools combining agricultural with literary instruction are most calculated to benefit, and to whom, consequently, they ought to prove most acceptable.

Religious Denominations.—Religious Instruction.—The only time set apart for Religious Instruction in the Boys' School is from ten till twelve on Saturdays; but there is no arrangement of this kind specified on the time-table of the Girls' School. The Protestant children, I was informed, do not attend on this day, and the few Roman Catholic boys and girls who come are instructed in their Catechism, &c., by the

Master. The Mistress states, that in summer time she gives Religious Instruction to some of the girls, who remain after school hours.

On the rolls of the school, at the end of last December, there were—

44 boys and 47 girls, Roman Catholics; and
10 ,, 3 ,, Protestants.

Since the appointment of the present teachers, no clergyman has ever come to the school to instruct the children belonging to his flock, although every facility for the purpose could be afforded in this school, which is under the sole and immediate control of the Commissioners.

The Parish Priest has, however, occasionally visited the school during the times for ordinary school business.

Literary Instruction.—The following is a sketch furnished to me by the master of the course pursued in his school; and the time-table which is appended to the Report will show the order of the business, and the time allotted to each subject :—

"With regard to the instruction given to the different classes and the method of giving it, I have to observe, that besides personally hearing each class to read, I every day read a paragraph or two of the lesson for some one class, the whole class repeating after me. This I *always* do when the lesson is poetry. In Grammar, the third and fourth reading classes form an advanced class, learning tasks from Sullivan's, as a text-book, correcting the errors individually, and parsing sentences either from their reading lessons, or written on the black board. The second class tell the parts of speech from their daily lesson, and have the various definitions explained orally. In Geography the advanced class (third and fourth) use the Geography Generalized as a text-book, taking the "Course for Beginners" and the "Advanced Course" on alternate days. During the past year they studied, and had explained to them, all the chapters in the beginning, as far as the chapter on Mountains, inclusive, and all the chapters, in the other portion, relating to Europe. The junior classes learn from the map every day, a great deal of attention being paid to the map of Ireland. In Arithmetic, the second class recite tables and work sums every day in class and also at seats. The senior classes have the various advanced rules explained and illustrated at the black board. In the more advanced branches of Mathematics, eight at present on the rolls are learning Geometry, two Algebra, three have learned Mensuration, two have learned the first part of Taylor's Surveying, and have practically been taught to survey with the chain. Several, besides, have gone through the Board's work on Book-keeping. In Writing, the junior classes are taught by lessons from the board; the second class write small-hand on paper; the senior boys write from copy-lines, from books, and from dictation."

The advanced boys receive, besides, in the school-room, for half an hour each day, instruction on agricultural subjects from the Agriculturist; and six of these, who constitute the industrial class, work on the farm from two till four on the first five days of the week, and for three hours on Saturday. These young lads receive sixpence a week as a remuneration for their labour.

The instruction given to the girls is described by the mistress as follows:—

"The school is partly literary, and partly industrial. The literary business occupies four hours every day, Saturdays excepted, and comprises the usual branches taught in a Female National School. The industrial business occupies one hour daily, and comprehends sewing in all its branches, lace-work and embroidery, knitting, netting, platting, &c.

"The school for literary purposes is divided into four reading classes. I hear all the classes read to myself daily. The children of every class except the first spell by sentences after each reading lesson. The senior classes parse; but from the difficulty of inducing them to buy books, no tasks in Geography or Grammar are learned. The principle of collective teaching I adopt in every case which admits of it. Thus, I unite the second and sequel in teaching Tables and the elements of Arithmetic; the third and fourth classes join in Geography from map, and also in Grammar and Arithmetic. While I am engaged in teaching a class, I always contrive to have another class at some business under a Monitress, so as to have two classes always going on at the same time. The advanced classes write both from dictation and from books.

"In the industrial department, I take a great deal of pains to make the children neat and good workers at the needle. Many of them have executed pieces of fancy work with great neatness and taste, and nearly all are very good plain workers. We have finished for the Messrs. Wallace, of Glasgow, since I came here, ten dozen and three pieces of muslin, for which they have paid only £2 13*s.* 4½*d.*, not more than one-third of the real value of the work done.

"I have kept no regular account of the various other pieces of work done, nor of the sums earned by the girls; but I mean to do so henceforth. I can say, however, that they have been taught to cut out and make frocks, gowns, shirts, and other articles of dress for themselves and families, besides making shirts, &c., for many respectable persons in the neighbourhood, and for which they have always been paid a fair price."

The time-table, which is annexed, with that of the Boys' School, exhibits the arrangements made by the Mistress for teaching the various subjects to the several classes. This table is not, in my opinion, judiciously framed in some of its details, and seems to have been drawn up without sufficient consideration. Thus, for the sequel class, which, in most of our schools, naturally belongs to the junior division, there is allowed one hour daily for Writing, the same for Arithmetic, and only half an hour a day for Reading and Parsing. In like manner with the senior division, including the third and fourth classes, the Reading and Parsing Lesson is got over in half an hour, while one hour and a-half is set down for Arithmetic. The Teacher's attention has been called to these defects, and they will, no doubt, be remedied.

The same observation, regarding the shortness of the reading lessons in particular, applies to the distribution of time set forth for the Boys' School; and I have pointed out to the master the necessity of modifying these arrangements, so as to allow a longer time than half an hour for the more essential branches, and a shorter time for those of a less important character.

Results of the Examination on the day of my visit.—There

Mr. Butler.

were present on the 24th of January, 1853, when I visited the school, twenty-seven boys and seventeen girls, of whom eleven boys and six girls belonged to the senior division, the remaining children being in the first, second, and sequel classes.

The *Reading* was, on the whole, very fair in the Boys' School, five of the pupils reading not only with correctness and fluency, but also with a tolerable share of intelligence; but of the six girls entered as in the third and fourth classes, only one could be said to read with any degree of ease or fluency; and of the other sixteen girls, only six could read correctly in the Second Lesson Book.

As regards the *explanation* of the lesson, it appeared to me to be of a purely technical character, such as would result from requiring of the children no more than a verbal interpretation, or "dictionary meaning," of certain difficult words, which oftentimes is mere matter of rote, instead of getting them to translate into their own words the sense of the passage they are reading: in short, sufficient care did not seem to have been taken to make them *understand* what they read.

The oral *spelling* in both schools was remarkably good, and I regret not having been able to further test the proficiency of the children in Orthography, by giving them an exercise in writing from dictation. Eleven of the boys and eight of the girls were returned as frequently practised in this way, both on slates and on paper.

The copy-books in both schools seem to have been kept with much care and neatness, and the specimens of *penmanship* which I saw were satisfactorily executed.

Twenty of the boys and sixteen of the girls were stated to be learning *arithmetic*, but only ten of the former and six of the latter had advanced beyond the Simple Rules. The boys answered with readiness, and intelligently, the questions put to them, and acquitted themselves very fairly in this branch, in which they appeared to be carefully instructed by the Master.

Six of the boys were examined in *parsing*, and the results were satisfactory, as four parsed tolerably, and one exceedingly well. In the Girls' School, those forming the Grammar Class did not know even the definitions of the parts of speech.

My time was so limited as to preclude my questioning the children on Geography, or examining the boys on some of the other branches taught in the school.

Order and Discipline.—I have great pleasure in stating, that the school-house is kept with neatness, and that both the Teachers appear to have spared no pains in enforcing order and regularity in their respective schools, in which the discipline seems to be in a very effective state. The want of a play-ground is greatly felt, and increases very much the difficulty the Teachers experience in maintaining a due degree of quietness and attentiveness on the part of the children.

The school accounts have been kept with great care; they are accurate and scrupulously neat.

School Requisites.—During the year school requisites, books, paper, pens, &c., were purchased to the amount of £1 17*s.* 10½*d.*, by the boys, and of £1 3*s.* 1*d.*, by the girls. They are obtained at the reduced rates at which they are sold to National Schools, from the Master, to whom the Board have entrusted £10 worth of books, &c., for which he is held answerable, and of which he renders an account every half-year.

Suggestions.—Before concluding this Report, I take the liberty of offering the following suggestions, the adoption of which will, in my opinion, tend to promote the welfare of this institution, and increase its usefulness.

I. As in District Model Schools, an annual public examination of the children should be held, at which premiums would be awarded to the children most distinguished by their punctual attendance, their good conduct, their proficiency. A small sum of £3 or £4 a year, would, perhaps, be sufficient.

II. There should be a more frequent inspection of the School by the District Inspector, who should visit it at least once every two months; and a special form of Report should be provided, as that in use for the District Model Schools is not suited to the circumstances of this school, nor calculated to bring out the information which it is desirable to have regarding it.

III. It would be most desirable that persons residing in the neighbourhood, especially clergymen, should be requested to visit the school frequently, and enter their names and observations in the Report Book.

IV. A small sum towards petty expenses incidental to all similar establishments, should be placed in the Teacher's hands, the expenditure of which could be readily checked by the Inspector at his visits.

V. The Master should be supplied with a case of mathematical instruments, and a short treatise on their use, to assist him in giving lessons in Geometry and in Linear Drawing, both to the pupils of the school and the agricultural boarders. A terrestrial globe should also be provided.

I have the honour to be your obedient servant,

EDWARD BUTLER.

The Secretaries,
Education Office.

Time Table of Kyle Park Male National School, 1852.

Time.	First Class.	Second Class.	Third Class.	Fourth Class.
From to				
10 10½	Spelling and Reading,	Preparing Lessons,	Arithmetic from Books,	Arithmetic or Algebra.
10½ 11	Writing elements of Letters,	Spelling and Reading,	Reciting Tasks in Grammar,	Reciting Tasks in Grammar.
11 11½	Elements of Arithmetic,	Writing from Lesson Book,	Reading Third Book or Scr. Extr.,	Mensuration or Book-keeping.
11½ 12	Writing figures and Numbers,	Arithmetic in Class,	Writing from Dictation or Book,	Reading Fourth or Fifth Book.
12 12½	Object Lesson,	Do. at Seats,	Studying Definitions and Rules of Arithmetic,	Writing from Dictation.
12½ 1	Spelling and Reading,	Elements of Geometry,	Agricultural Lesson from Agriculturist,	Agricultural Lesson from Agriculturist.
1 1½	Penmanship,	Penmanship,	Penmanship,	Penmanship.
1½ 2	Arithmetical Tables,	Spelling and Reading,	Arithmetic and Book-keeping,	Geometry.
2 2½	Geography from Map,	Geography from Map,	Linear Drawing,	Linear Drawing.
2½ 3	Drawing or Printing,	Drawing or Printing,	Geography Generalized,	Geography Generalized.

Religious Instruction—On Saturdays, from 10 to 12 o'clock. Vacations—A week at Easter, and a fortnight in Summer and at Christmas.

Time Table of Kyle Park Female National School, 1852.

Time.	First Class.	Second Class.	Sequel Class.	Third and Fourth Classes.
From to				
10 10½	Spelling and Reading.	Spelling and Reading,	Arithmetic,	Arithmetic.
10½ 11	Writing from Copy-lines,	Writing,	Reading and Parsing,	
11 11½	Tables and Arithmetic,	Tables and Arithmetic,	Writing from Book,	Reading and Parsing.
11½ 12	Geography,	Geography,	Arithmetic,	Writing from Dictation.
12 12½	Spelling and Reading,	Spelling Book Superseded,	Spelling Book Superseded,	Arithmetic.
12½ 1	Writing,	Grammar,	Grammar,	Grammar.
1 1½	Tables,	Writing,	Writing,	Writing.
1½ 2	Spelling and Reading,	Tables,	Geography,	Geography.
2 3	Writing and Tables,	Sewing, Knitting,	Sewing and Knitting, &c.,	Sewing and Knitting, &c.

The advanced Girls sew, &c., from 9 to 10, and continue after school hours until 6, during the Summer season.

APPENDIX I.

Page

I.—Head Inspectors' Reports on Examinations of Teachers in 1852, ... 291

II.—Questions (to be answered in Writing) proposed at the Examinations of Teachers in 1852, . 327

I.—HEAD INSPECTORS' REPORTS on EXAMINATIONS of TEACHERS.

No. 1.—GENERAL REPORT on EXAMINATION of TEACHERS, Male and Female, held in Districts, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and 11, in the year 1852, by WILLIAM M'CREEDY, Esq., Head Inspector.

Mr. M'Creedy.

April, 1853.

GENTLEMEN,—I beg to submit the following as my Report on the examinations of Teachers, male and female, held by me during the past year.

Districts.—The districts entrusted to me last year were Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and 11, extending through the counties of Antrim, Armagh, Cavan, Donegal, Down, Fermanagh, Londonderry, Monaghan, and Tyrone, in the province of Ulster; and in Connaught, to Leitrim and Sligo.

Time occupied.—I commenced the examinations at Coleraine, in District No. 3, on Tuesday, the 19th of October, and continued them, with but one or two short interruptions, up to the 24th of December, when I terminated them at Ballymena, in District No. 4.

Order of Examinations same as year 1851.—The course of examination followed last year was, for Teachers of both sexes, precisely the same, as to order, subjects, and arrangements, as that adopted in 1851; and which I have so fully described in my General Report for that year that I feel it needless to dwell much upon it here. The written examination of the male Teachers was, as before, held in Easter week, under the sole superintendence of the District Inspector, and occupied one whole day; and their oral examination, to which, in every case, two days were devoted, and which was conducted under the joint management of the District Inspector and myself, had place afterwards in the interval of time specified above. As formerly, the examination, written and oral, of the females occupied, for each district, only one day; and in every instance the work of questioning them on the subjects of their course was participated in, to greater or less extent, by their respective Inspectors.

Number of Male Teachers at written Examinations.—There were, in all, 278 male Teachers, at the written Examinations of Easter week, throughout my eleven districts, and of these 75 were candidates for promotion, while the remainder were, the great majority of them, probationers, and some few classed men, summoned by the District Inspectors for special reasons.

Of the 75 candidates who attended at the written Examination, there were only twelve whom I thought worthy of being recalled to the oral, and these, I am happy to say, were all promoted to the grade they aspired to; the remaining 63 I decided not to recall, as their written exercises were not

APPENDIX I.

I. Head Inspectors' Reports on Examination of Teachers.

Mr. M'Creedy.

of a character to warrant the presumption that they were at all qualified to offer for further promotion.

So many as 43 of the probationers who had attended the written examination were absent from the oral; of these 21 were reported sick, 9 had been summoned in the interval of the two examinations to the Training School in Dublin, and 13 had resigned their connexion with the Board.

There were present, however, at the oral examination not less than 148 probationers* and 25 classed men, including in these last the 12 candidates mentioned above: consequently, there were, in all, examined orally by me last year, throughout my eleven districts, 173 male Teachers. I am grieved to add, that of these so many as 15 probationers were dismissed as incompetent.

Changes in Classification.—The subjoined table exhibits the rank before and after examination of the remaining 158 male Teachers still retained by the Board:—

	Probationers. Salary, £11.	III.^{2} Salary, £15.	III.^{1} Salary, £18.	II.^{2} Salary, £20.	II.^{1} Salary, £22.	I.^{3} Salary, £25	I.^{2} Salary, £30.	I.^{1} Salary, £36.	Total.
As formerly ranked,	13	14	4	3	3	1	–	–	158
As at present, . .	27	100	20	3	4	1	3	–	158

Keeping in mind that one of the Teachers, formerly a probationer, but now ranked as of III^1, being still an assistant, will only receive, notwithstanding his promotion, a salary of £15 per annum, the following shows the change effected in the incomes of the above 158 Teachers, as far, at least, as regards their receipts from the Board:—

158 Male Teachers—amount of present salaries, .	£2,417	0	0
158 ,, ,, amount of former ditto, .	1,896	0	0
Increase, . . .	£521	0	0
158 Male Teachers, average salary at present for each, ...	£15	5	11¼
158 ,, ,, average salary formerly for each, ...	12	0	0
Increase, . . .	£3	5	11¼

From which it appears, that while the average salary formerly enjoyed by those Teachers, is less than that returned for 1851, which, again, as I observed in my Report for that year, was under any I had up to that time returned for Male Teachers, the increase on the average to each, consequent on last year's classification, is the greatest I have yet had—a result

* Of this number there was one man who had not been at the written examination, and who was summoned by mistake to the oral.

owing to the twofold circumstance of the great number of probationers examined, and the very small proportion of these left stationary.

School Rates.—From the returns made to me by these 158 Male Teachers in reference to the state of their schools, it would appear that there were unitedly on their respective rolls at the end of June, 1852, no less than 11,310 pupils, of whom, again, there were—

At rates above 3*s.* 3*d.* per quarter,	. . .	97
At rates not over 1*s.* 1*d.*	,, . . .	6,436
At intermediate rates,	,, . . .	2,357
As gratuitous,	,, . . .	2,420

Amount of School Fees.—By the same returns, it results that the annual amount of school fees received from the pupils in attendance was—

Under	£1	in 13 cases.
£1, but under	2	in 33 ,,
2, but under	5	in 66 ,,
5, but under	10	in 27 ,,
10, but under	15	in 8 ,,
15, and over	15	in 6 ,,

And in five cases nothing at all is acknowledged by the Teachers as received from their pupils.

The whole amount of school fees received in the entire 158 schools is returned at £656 8*s.* 1*d.*, which would yield an annual average income for each school, from this source alone, of about £4 3*s.* 1*d.*; which, increased by the annual value of the endowments, &c., enjoyed, would give, from exclusively local sources, an average income for each of £5 2*s.* per annum—a sum very nearly equal (only wanting a few pence) to what would seem, according to the Commissioners' Report of 1851,* the average income from the same sources of our schools generally throughout the entire country, though somewhat under the general average for the schools of both Ulster and Leinster.

Local Endowments.—Out of the entire 158 schools, there are twenty-two returned by their Teachers as endowed in greater or less amount by their respective committees or patrons; and of these there are—

8	Enjoying annual grants under £5.	
10	ditto,	of £5, but under £10.
4	ditto,	of £10 and above £10.

Teachers' Residences.—There were only nine teachers, the same number as last year, who returned themselves as provided with residences; while, on the other hand, there were so many as twenty-eight, most of them on the very lowest incomes, who reported themselves as obliged to pay rent for their school-houses.

Total Annual Income of Teachers.—Taking into account

* See *Eighteenth Report*, vol. ii., p. 289.

APPENDIX I.

I. Head Inspectors' Reports on Examination of Teachers.

Mr. M'Creedy.

their receipts from all sources, Board's salary, school fees, local contributions or endowments, where any, and even including the annual value of the few residences they are provided with, it follows from the returns with which I have been furnished, that of the 158 male teachers examined, there are—

15 whose total incomes are under £15.
91 whose total incomes are £15 but under £20.
27 whose total incomes are £20 but under £25.
17 whose total incomes are £25 but under £30.
4 whose total incomes are £30 but under £40.
4 whose total incomes are £40 and *above* £40.

By which it appears that *one-tenth* (in 1851 it was *one-fifth*), are in the receipt of incomes under £15 a year; and that there are about *two-thirds* (the same proportion as for preceding year's examination), whose entire incomes from all sources do not rise to £20.

In the subjoined table are exhibited the incomes of the same 158 teachers, in connexion with their scale of classification:—

		Gross Income.	Average for each.
Probationers and Third Class, including Assistants,	147	£2.761 4 0	£18 15 9
Second Class,	7	218 16 0	31 5 1½
First Class,	4	165 3 0	41 5 9
Total,	158	£3,145 3 0	£19 18 1½

Here the average income for all is £1 3*s.* 3*d.* above that returned for 135 Teachers of our ordinary schools examined in 1851; and which excess is, no doubt, owing, in great part, if not wholly, to the slight augmentation of salary granted by the Board last year.

I may add, that so many as 41 teachers are in receipt of incomes apart from their schools, as tuitions, clerkships, land surveying, &c. The entire sum given in by them as obtained in these ways was £182 for the past year.

Attendance of Pupils.—From the returns given in by the Teachers, it appears there are only 13 schools the attendance at which is above 50, and more than one-third at which it is under 30. It results also, from the same returns, that of the entire 158 schools, there were—

56 in which the average attendance of pupils is under 30.
62 in which it amounts to 30 but is under 40.
27 in which it is from 40 up to 50.
11 in which it is above 50 but under 70.
2 in which it is between 70 and 100.

It further appears that the total average attendance of pupils on all the above for the year ending June, 1852, was 5,363; thus yielding an average for each of the 158 schools of 34 pupils; while the proportion per cent. of the average daily attendance throughout the entire year to the average number on the rolls for the same period, taking one month with another, was 53·5; that is to say, that of every 100

pupils on the average on the rolls of these 158 ordinary schools, about 54 only would seem to give actual attendance throughout the twelve months. These last results are almost exactly the same as those reported by me in the case of 134 schools whose Teachers I classified in the year 1851, and as they likewise agree very closely with returns of a similar kind obtained at other times and for other and different schools, they may, I think, be safely regarded as a very near approximation to the truth for our ordinary schools generally throughout the entire kingdom.

The fluctuating nature of the attendance at our schools may receive further illustration from the following facts : that in the case of the 158 schools now treated of, while there were—

On the rolls at the end of June, 1852,	11,310	pupils.
There were admitted during the year ending the same date,	8,549	,,
And struck off the Rolls during same period,	4,911	,,

Cost of Education.—Taking into account the average number of pupils in attendance, and comparing this with the incomes of the schools, it follows—

	Per annum. s.	d.
That the average payment from all sources made to the schools for each pupil is	12	7½
That the average payment made by the Board alone for each pupil is	9	7½
That the average amount of school fees paid by the people for each pupil is	2	5¼
That the average payment from *all local sources* made to the schools for each pupil is	3	0

It appears, therefore, from this that three-fourths of the remuneration received by these Teachers for the instruction of their pupils are paid by the Board, and that the payment from all local sources whatever made them for each pupil would not amount to three farthings per week throughout the year. And even these proportions, low as they are, would not hold good for the whole country. By the most accurate calculations I can make, for the whole body of our Teachers, very near four-fifths of the total average income enjoyed by each would appear to be dependent on the Board's aid, while the payments made them from all local sources would seem not to amount to more, on the average, than two shillings a year for each child educated in their schools, or something less than a halfpenny a week.

Ages of Teachers.—The ages, as returned by themselves, of the 158 Teachers classified, were as follow :—

49 under 20 years of age.
80 of 20 years, but under 30 years of age.
13 of 30 years, but under 40 years of age.
13 of 40 years, but under 50 years of age.
3 of 50 years, and above 50 years of age.

The average age for each of the 158 Teachers would appear to be 25 years nearly, being one year under the average

Mr. M'Creedy.

or 1851, and three years under that of 278 men examined in 1850. Last year, indeed, the great majority of the Teachers who offered for examination were very young, and had, for the most part, just entered into the service of the Board.

Teachers' Period of Service.—As to their length of service as Teachers there were—

120 who reckon less than 5 years' such service.
17 who reckon 5 years' service, but under 10 years.
4 who reckon 10 years' service, but under 15 years.
17 who reckon 15 years' service, and *over* 15 years.

While again—

140 have been less than 5 years under the Board, and of these 35 *not more than* 1 *year*.
15 have been 5 years, but under 10 years.
3 have been 10 years, but under 15 years.

Of the 158 only 30, or less than one-fifth, were married; 109, or above two-thirds, had been educated at National Schools; and 9 only had been trained at the central establishment in Dublin.

Supply of School Requisites.—The supply of school requisites, as lesson books, writing paper, slates, &c., obtained at half-price, for sale to the pupils for the year ending June, 1852, amounted, for the 158 Schools, to £197 16*s.* 4*d.*, which would give an average for each of £1 5*s.* 0½*d.* There were, however, as many as 18 which had purchased none during the entire year.

FEMALES.

Number of Females Examined.—Throughout my eleven districts I examined as many as 72 Female Teachers, of whom 42, or considerably more than one-half, were probationers. Three only out of the entire number were dismissed as unqualified; 36, or one-half, were promoted; and 33, nearly the remaining half, were left as they ranked before examination.

Changes in Classification.—Omitting the 3 Teachers who were dismissed, a Poor Law Union Teacher, as not salaried by the Board, a young Assistant-Teacher still paid as a Monitress only, and a Candidate-Teacher examined and classified, but not yet in the receipt of salary, the following table exhibits the standing, before and after examination, of the remaining 66, included in the accompanying returns of tabulated particulars:—

FEMALE TEACHERS.

	Probationers. Salary £10.	III.^{2} Salary, £13.	III.^{1} Salary, £15.	II.^{2} Salary, £16.	II.^{1} Salary, £17.	I.^{3} Salary, £19.	I.^{2} Salary, £22.	I.^{1} Salary, £25.	Total.
As formerly ranked,	38	9	8	8	3	–	–	–	66
As at present, . . .	16	15	22	5	5	3	–	–	66

Now, keeping in mind that 6 of these at the time of examination were Assistants—one of III., entitled to £13 per annum, and five probationers, four of whom were paid £10 a-year each, and one only £8—and that, after examination, the first, though promoted to III.[1], will still be paid as before, and of the others, three raised to III., and one to III., will now all be paid alike—the highest salary awarded to Assistants £13 per annum, while, again, one classed as III.[1], and one still remaining a probationer, will be paid no more than formerly, the one £10, and the other only £8 per annum, we have the following as the results of their recent classification:—

	£	*s.*	*d.*
66 Female Teachers—amount of present salaries,	892	0	0
66 ,, —amount of former do.,	794	0	0
Increase, ...	£98	0	0
66 Female Teachers—average salary at present for each, ...	13	10	3½
66 Female Teachers—average salary formerly for each, ...	12	0	7¼
Increase, ...	£1	9	8¼

School Rates.—Of the 65 schools connected with these Teachers, it appears from the returns with which I have been furnished, that there were on their rolls, at the end of June, 1852, not less than 4,879 pupils, of whom there were entered—

At rates above 3*s.* 3*d.* per quarter, . . .	134
At rates not above 1*s.* 1*d.*, ...	2,947
At intermediate rates, ...	620
As gratuitous, ...	1,178

Amount of School Fees.—From the same returns it follows, for these 65 schools, that the total annual amount of fees paid in by the pupils was—

Under	£1 in 11 cases.
£1, but under	£2 in 16 cases.
£2, but under	£5 in 22 cases.
£5, but under	£10 in 6 cases.
£10, and *over*	£10 in 5 cases.

And in so many as five cases nothing whatever was acknowledged as paid by the pupils.

The total amount of school fees paid to the entire 65 schools would seem to be £288 13*s.* 6*d.*, which, divided among them, would give an average for each, from this source alone, of £4 8*s.* 9¾*d.* If we add to this the average annual value of the endowments, &c., they enjoy, the yearly income of these Schools received from all local sources will be found to be £5 17*s.* 9½*d.* for each, which is within a *few pence* of what would appear to have been, in the year 1851, the average income from the same sources of the entire body of our Schools throughout Ulster.

Local Endowments.—Only three schools are provided with residences for their Teachers, while there are not less than 12

Mr. M'Creedy.

whose Teachers are obliged to pay an annual rent for their school premises.

There are 14 schools, or somewhat more than a fifth, endowed by local parties, and of these there are—

6 enjoying annual grants under £5.
6 do. of £5, but under £10.
2 do. of £10, and *above* £10.

The whole amount granted annually in this way to these fourteen schools appears to be £76 3*s.*

Teachers' Total Incomes.—According to the returns given in by them, it would seem to follow, for these 65 teachers, that there are—

23 whose total incomes are under £15.
30 whose total incomes are £15, but under £20.
8 whose total incomes are £20, but under £25.
3 whose total incomes are £25, but under £30.
1 whose total income is £30, but under £40.

By this, therefore, it appears that more than one-third are in receipt of incomes under £15 a-year, and that six-thirteenths, or nearly one half, though their incomes amount to £15, or rise somewhat above it, are yet paid less than £20 a-year; while something less than one-fifth only are in the enjoyment of incomes of £20 and upwards.

Again, as the gross income for all the 65 above referred to is only £1,078 11*s.* 6*d.*, the average for each is no more than £16 11*s.* 10½*d.* Excluding the six Assistants, I find the average income of the 59 principal Teachers is, for each, about £17 0*s.* 3*d.* per annum.

Further on this point, and excluding from the entire number classified merely the Monitress and unpaid Assistant, there are 67 Teachers, whose incomes, in connexion with their classification, are as follow :—

		Gross Income.	Average for each.
Probationers and Third Class, including Assistants,	53	£810 18 0	£15 6 0
Second Class	11	217 1 6	19 14 8
First Class,	3	80 12 0	26 17 4
Totals,	67	£1,108 11 6	£16 10 11

Attendance of Pupils.—Omitting the Poor Law Union School, and two others, from whose Teachers no returns of attendance were obtained, there are 65 ordinary schools, whose state of attendance is as follows :—

26 in which the average attendance is under 30.
22 in which it amounts to 30, but is under 40.
7 in which it is from 40 up to 50.
4 in which it is above 50, but under 70.
3 in which it is between 70 and 100.
3 in which it is between 100 and 150.

While the total average attendance for all, for the year ending June, 1852, was 2,535, which would give for each an average attendance of only 39·0 pupils. The proportion per cent. which this last bears, in the same schools, to the average number on their rolls, throughout the year, appears to be 55·0, nearly.

For the same 65 Schools, the returns made by their Teachers show that there were—

On the Rolls at the end of June, 1852,	. .	4,879 pupils.
Admitted during the year ending the same date,		3,978 ,,
Struck off the Rolls during the same period,	.	2,522 ,,

Cost of Education.—As to the cost of education incurred for the children of these Schools, it follows, from the returns handed in for 65 of them, and which I believe to be correct and trustworthy documents, that—

The average payment, from all sources, made to the Schools, for each pupil, is	11*s.* 8½*d.* per annum.
The average payment made by the Board alone, for each pupil, is	8*s.* 8¾*d.* ,,
The average amount of school-fees paid by the people, for each pupil is	2*s.* 3¼*d.* ,,

The two first items are higher than any hitherto returned by me for Female Schools, while the last, though a little more than that given in Report of 1851, is not less than one-third under that of the two previous years.

As in the case of the Boys' Schools, or those under Male Teachers, noticed in the first part of this Report, the annual payment, from all local sources, for each pupil of the above 65 Schools, would appear to be 3*s.*, or something less than ¾*d.* per week, for 52 weeks in the year.

Supply of School Requisites.—For the same 65 Schools, the amount of school requisites, as lesson books, writing-paper, &c., purchased at half-price, for sale to the Pupils, was, for the year ending June, 1852, £52 7*s.* 9*d.*, which gives an annual supply, for each School, of 16*s.* 1½*d.*, nearly. No less, however, than 23 of these Schools had ordered no books or other requisites during the above period.

Ages of Teachers, and Period of Service.—Excluding the Monitress, I find, from the returns of the 68 remaining Teachers examined and classified, that their average age is, as nearly as possible, 22½ years—an average somewhat lower than any I have yet had for females, whether in 1851 or preceding years. Most were, indeed, very young, and none appeared advanced beyond even middle age; for, of the whole number, there were—

23 under 20 years of age.
38 of 20 years, but under 30 years of age.
7 of 30 years, but under 35 years of age.

The same 68 Teachers may be classed, as to their respective periods of service, as follows:—

53 who reckon less than 5 years' service as Teachers.
10 who reckon 5 years' such service, but under 10 years.
5 who reckon 10 years', but under 15 years'.

While again—

54 have been less than 5 years under the Board.
9 have been 5 years, but under 10 years.
5 have been 10 years, but under 15 years.

Only 9 of the entire number are married; 22 have been

APPENDIX I.

I. Head Inspectors' Reports on Examination of Teachers.

Mr. M'Creedy.

trained; and 58, or about *five sixths*, have received their education at National Schools.

Written Examination of Males.—In Table A, appended to this Report, I have given a summary of the results of the answering at this examination. Taken as a whole, this Table exhibits results very little different from those of the year 1851.

In the case of the Third Class Men, and those examined on Paper C, there appears a slight improvement in the answering on grammar, Lesson Books, and mensuration, while in geography it is inferior; but with little difference, however, on the average style of answering for the whole course.

With the Second-class Men, or those examined on Paper B, the answering is much the same as in 1851, except that on the subject-matter of our Lesson Books it is much inferior.

With the First-Class Men, again, or those examined on Paper A, while the average answering is somewhat higher in History and Algebra, it falls very far below that of 1851 in Geography and the Lessons on Reasoning.

Oral Examination.—I am happy to report, however, that, in the oral examination, which, as I have stated at beginning of this Report, occupied, for each man, two whole days, the answering was, in general, very fair, and exhibited, except in Geography and Natural Philosophy, a decided advance on that of the previous year. (See Table B.)

FEMALES.

Written Examination of Females.—In Table C, I have brought together the results of the written examination of the Female Teachers, and, by comparing it with the like Table of 1851, it will be seen that, except in the case of the First-Class Teachers, or those examined on Paper A, who yet are merely not decidedly retrograde, the average rate of answering last year was, on the whole, inferior.

Oral Examination.—At the oral examination, the females acquitted themselves better, and in some branches of much importance—as Grammar and Arithmetic—their answering was superior to that of the women examined the year before, and their style of reading was generally more correct and tasteful. (See Table D.)

Returns of District Inspectors as to State of Schools.—In Tables E and F will be found summaries, under distinct heads, of the internal economy and management of the Schools of the Teachers referred to in this Report. The returns from which these were taken were in all cases furnished by the District Inspector, and may, therefore, be relied on as giving a correct view of the general state of those Schools, and that in regard to many most important particulars.

I have the honour to remain, Gentlemen, your obedient servant,

WILLIAM M'CREEDY, Head Inspector.

The Secretaries.

TABLE A. (*Mr. M'Creedy's Report.*)—Examination of Male Teachers in 1852. Summary of Particulars of Written Examination.

157 Male Teachers.	Grammar.	Geography.	History.	Money Matters.	Lessons on Reasoning.	Lesson Books.	Arithmetic.	Algebra.	Geometry and Mensuration.	Natural Philosophy.	Book-keeping.	Total.
PAPER C,												
Containing questions in	7	6	–	3	–	6	9	–	5	–	2	38
Number of Teachers examined,	142	142	–	142	–	142	142	–	142	–	142	142
Total number of answers open,	994	852	–	426	–	852	1,278	–	710	–	284	5,396
Number of *satisfactory* answers given,	179	55	–	67	–	70	402	–	61	–	12	846
Number of *imperfect* answers given,	383	288	–	147	–	322	284	–	60	–	19	1,503
Number of answers returned on the average, instead of 20,	11·3	8·0	–	10·0	–	9·2	10·7	–	3·4	–	2·2	8·7
PAPER B,												
Containing questions in	6	5	5	4	3	7	6	6	6	8	2	58
Number of Teachers examined,	11	11	11	11	11	11	11	11	11	11	11	11
Total number of answers open,	66	55	55	44	33	77	66	66	66	88	22	638
Number of *satisfactory* answers given,	17	14	15	14	2	13	28	12	5	11	–	131
Number of *imperfect* answers given,	26	24	12	16	16	20	18	11	3	13	1	160
Number of answers returned on the average, instead of 20,	13·0	13·8	9·8	13·6	10·9	8·5	14·0	7·0	2·4	5·4	0·9	9·1
PAPER A,												
Containing questions in	6	6	5	3	4	7	5	6	6	9	2	59
Number of Teachers examined,	4	4	4	4	4	4	4	4	4	4	4	4
Total number of answers open,	24	24	20	12	16	28	20	24	24	36	8	236
Number of *satisfactory* answers given,	12	7	8	6	2	12	12	14	8	6	4	92
Number of *imperfect* answers given,	5	11	3	6	5	11	1	6	6	12	2	68
Number of answers returned on the average, instead of 20,	15·0	15·0	11·0	20	8·7	16·4	13·0	16·7	11·7	10·0	15·0	13·5

TABLE B. (*Mr. M'Creedy's Report.*)—Examination of Male Teachers in 1852. Summary of Particulars of Oral Examination.

158 MALE TEACHERS.

	Probationers.	Third Class.	Second Class.	First Class.	Total.	Per cent.
READING.						
Number whose reading was very good or good,	1	36	2	3	42	26·6
,, ,, fair or tolerable,	20	74	5	1	100	63·3
,, ,, poor, indifferent, or bad,	6	10	–	–	16	10·1
,, ,, very bad,	–	–	–	–	–	–
RULES FOR SPELLING AND VERBAL DISTINCTIONS.						
Number whose answering was very superior,	–	9	2	1	12	7·6
,, ,, very good or good,	3	44	4	2	53	33·5
,, ,, pretty fair,	14	52	–	1	67	42·4
,, ,, poor, indifferent, or bad,	9	12	1	–	22	13·9
,, ,, very bad,	1	3	–	–	4	2·5
ETYMOLOGY, OR THE DERIVATION OF WORDS.						
Number whose answering was very good or good,	–	25	4	1	30	19·0
,, ,, pretty fair,	7	44	3	1	55	34·8
,, ,, poor or bad,	13	41	–	2	56	35·4
,, ,, very bad,	7	10	–	–	17	10·7
GRAMMAR.						
Number whose answering was very good or good,	–	31	5	4	40	25·3
,, ,, pretty fair,	4	51	2	–	57	36·1
,, ,, poor or bad,	16	35	–	–	51	32·3
,, ,, very bad,	7	3	–	–	10	6·3
GEOGRAPHY.						
Number whose answering was very superior,	–	5	–	2	7	4·4
,, ,, very good or good,	–	37	4	2	43	27·2
,, ,, pretty fair,	1	36	3	–	40	25·3
,, ,, poor or bad,	20	37	–	–	57	36·1
,, ,, very bad,	6	5	–	–	11	7·0
LESSON BOOKS.						
Number whose answering was excellent, very good, or good,	–	20	3	3	26	16·4
,, ,, pretty fair,	3	50	1	–	54	34 2
,, ,, poor or bad,	13	45	3	1	62	39·1
,, ,, very bad,	11	5	–	–	16	10·1

MALE TEACHERS—*continued.*

	Probationers.	Third Class.	Second Class.	First Class.	Total.	Per cent.
ARITHMETIC.						
Number whose answering was excellent, very good, or good,	–	21	2	4	27	17·2
,, ,, pretty fair,	6	65	5	–	76	48·4
,, ,, poor or bad,	16	34	–	–	50	31·2
,, ,, very bad,	4	–	–	–	4	2·5
PENMANSHIP.						
Number whose style of writing was excellent,	–	–	–	–	–	–
,, ,, very good or good,	4	34	4	4	46	29·3
,, ,, pretty fair,	19	74	3	–	96	61·1
,, ,, poor, indifferent, or bad,	3	11	–	–	14	9·0
,, ,, very bad,	–	1	–	–	1	0·6
MONEY MATTERS.						
Number whose answering was very superior,	–	3	–	1	4	2·5
,, ,, very good or good,	–	33	6	3	42	26·7
,, ,, pretty fair,	6	50	1	–	57	36·1
,, ,, poor or bad,	14	28	–	–	42	26·7
,, ,, very bad,	6	6	–	–	12	8·0
MENSURATION.						
Number whose answering was very superior,	–	1	–	1	2	1·2
,, ,, very good or good,	1	28	5	3	37	23·5
,, ,, pretty fair,	5	50	2	–	57	36·1
,, ,, poor or bad,	10	34	–	–	44	28·0
,, ,, very bad,	10	7	–	–	17	11·2
LESSONS ON REASONING.						
Number whose answering was very superior,	–	–	–	–	–	–
,, ,, very good or good,	–	1	3	4	8	66·7
,, ,, pretty fair,	–	–	3	–	3	25·0
,, ,, poor or bad,	–	–	1	–	1	8·3
,, ,, very bad,	–	–	–	–	–	–
NATURAL PHILOSOPHY.						
Number whose answering was very good or good,	–	–	3	4	7	58·3
,, ,, pretty fair,	–	–	1	–	1	8·3
,, ,, poor or bad,	–	1	3	–	4	33·4
,, ,, very bad,	–	–	–	–	–	–

TABLE C. (*Mr. M'Creedy's Report.*)—Examination of Female Teachers in 1852. Summary of Particulars of Written Examination.

69 FEMALE TEACHERS.

	Grammar.	Geography.	Arithmetic.	Lesson Books.	Total.
PAPERS C.					
Number of Teachers examined on these in	42	42	42	42	42
Total number of answers demanded in	168	252	252	204	876
,, ,, *satisfactory* answers returned,	68	32	75	37	212
,, ,, *imperfect* answers returned,	66	59	35	38	198
Number of answers returned on the average, instead of 20,	16·0	7·2	8·7	7·3	9·3
PAPERS B.					
Number of Teachers examined on these in	20	20	20	20	20
Total number of answers demanded in	120	109	100	100	429
,, ,, *satisfactory* answers returned,	34	6	31	10	81
,, ,, *imperfect* answers returned,	59	41	27	24	151
Number of answers returned on the average, instead of 20,	15·5	8·6	11·6	6·8	10·8
PAPERS A.					
Number of Teachers examined on these in	7	7	7	7	7
Total number of answers demanded in	42	42	35	28	147
,, ,, *satisfactory* answers returned,	11	8	13	7	39
,, ,, *imperfect* answers returned,	19	21	6	9	55
Number of answers returned on the average, instead of 20,	14·3	13·8	10·8	11·4	12·8

TABLE D. (*Mr. M'Creedy's Report.*)—Examination of Female Teachers in 1852. Summary of Particulars of Oral Examination.

69 FEMALES.

	Probationers.	Third Class.	Second Class.	First Class.	Total.	Per cent.
READING.						
Number who read with taste and expression,	1	12	–	2	15	21·7
,, ,, judgment and intelligence,	2	8	6	–	16	23·2
,, ,, with tolerable fairness,	10	16	5	1	32	46·3
,, ,, indifferently,	2	3	–	–	5	7·2
,, ,, badly,	1	–	–	–	1	1·4

FEMALES—*continued.*

	Probationers.	Third Class.	Second Class.	First Class.	Total.	Per cent.
RULES OF SPELLING AND VERBAL DISTINCTIONS.						
Number whose answering was very superior,	–	–	1	1	2	1·4
,, ,, very good or good, .	3	11	6	1	21	30·4
,, ,, fair or tolerable, .	8	26	3	1	38	55·1
,, ,, bad or very bad, .	5	2	1	–	8	11·6
ETYMOLOGY OR THE DERIVATION OF WORDS.						
Number whose answering was very good or good, .	–	12	6	3	21	30·4
,, ,, fair or tolerable, .	6	21	5	–	32	46·3
,, ,, poor or bad, . .	6	4	–	–	10	14·5
,, ,, very bad, . .	4	2	–	–	6	8·7
GRAMMAR.						
Number whose answering was very superior,	–	–	–	–	–	–
,, ,, very good or good, .	–	11	7	1	19	27·5
,, ,, fair or tolerable, .	3	20	4	2	29	42·0
,, ,, poor, . . .	2	4	–	–	6	8·7
,, ,, bad or very bad, .	11	4	–	–	15	21·7
GEOGRAPHY.						
Number whose answering was very superior,	–	–	–	–	–	–
,, ,, very good or good, .	–	14	6	2	22	32·0
,, ,, fair or tolerable .	6	18	4	1	29	42·0
,, ,, poor, . . .	4	6	1	–	11	16·0
,, ,, bad or very bad, .	6	1	–	–	7	10·1
LESSON BOOKS.						
Number whose answering was very good or good, .	–	7	3	1	11	16·0
,, ,, fair or tolerable, .	4	20	5	2	31	45·0
,, ,, poor, . . .	3	6	1	–	10	14·5
,, ,, bad or very bad, .	9	6	2	–	17	26·1
ARITHMETIC.						
Number whose answering was very good or good, .	1	15	5	3	24	34·7
,, ,, fair or tolerable, .	6	17	6	–	29	42·0
,, ,, poor, . . .	1	2	–	–	3	4·3
,, ,, bad or very bad, .	8	5	–	–	13	18·8
PENMANSHIP.						
Number whose style of writing was excellent,	–	5	–	–	5	7·2
,, ,, very good or good, .	3	15	3	3	24	34·7
,, ,, fair or tolerable, .	6	14	7	–	27	39·1
,, ,, poor or bad, . .	7	4	1	–	12	17·6
,, ,, very bad, . .	–	1	–	–	1	1·4

TABLE E. (*Mr. M'Creedy's Report.*)—Summary of Returns of District Inspectors. Examination of Male Teachers in 1852.

157 MALES.

	Probationers.	Third Class.	Second Class.	First Class.	Total.	Proportion per cent.
METHOD OF TEACHING.						
Number of those whose method is very good or good,	–	20	3	4	27	17·2
,, ,, ,, is fair or tolerable, .	19	82	4	–	105	66·8
,, ,, ,, is very poor or bad, .	8	17	–	–	25	16·0
EXTENT AND KIND OF INSTRUCTION.						
Number of those whose course is very good or good,	1	12	6	4	23	14·7
,, ,, ,, is fair or tolerable, .	21	95	1	–	117	75·0
,, ,, ,, is poor or bad, .	5	11	–	–	16	10·3
DISCIPLINE.						
Number in whose schools it is very superior,	–	1	–	–	1	0·6
,, ,, ,, is very good or good,	2	34	6	3	45	28·8
,, ,, ,, is fair or tolerable, .	21	75	1	1	98	62·8
,, ,, ,, is indifferent or bad,	4	8	–	–	12	7·8
ORDER AND CLEANLINESS.						
Number of those in whose schools these are excellent,	–	1	1	1	3	2·0
,, ,, ,, are very good or good,	6	22	4	2	34	21·8
,, ,, ,, are fair or tolerable,	18	84	2	1	105	67·3
,, ,, ,, are neglected, .	3	11	–	–	14	8·9
PROFICIENCY OF PUPILS IN THEIR STUDIES.						
Number of those whose pupils' progress is satisfactory,	–	3	–	2	5	3·8
,, ,, ,, is very good or good,	3	3	4	1	11	7·0
,, ,, ,, is fair, . .	4	34	3	1	42	27·0
,, ,, ,, is tolerable or middling, .	7	48	–	–	55	35·2
,, ,, ,, is indifferent or poor,	13	30	–	–	43	27·0

TABLE F. (*Mr. M'Creedy's Report.*)—Examination of Female Teachers in 1852. Summary of Returns of District Inspectors.

67 FEMALE SCHOOLS.

	Probationers.	Third Class.	Second Class.	First Class.	Total.	Proportion per cent.
METHOD OF TEACHING.						
Number of those whose method is very good or good,	–	14	7	3	24	35·8
,, ,, ,, is fair or tolerable, .	12	22	4	–	38	56·7
,, ,, ,, is very poor or bad, .	4	1	–	–	5	7·5
EXTENT AND KIND OF INSTRUCTION.						
Number of those whose course is very good or good,	3	20	7	2	32	47·7
,, ,, ,, is fair or tolerable, .	8	15	3	1	27	40·3
,, ,, ,, is poor or very poor,	5	2	1	–	8	12·0
DISCIPLINE.						
Number in whose schools it is very superior,	–	1	1	–	2	3·0
,, ,, ,, is very good or good,	3	19	7	3	32	47·7
,, ,, ,, is fair or tolerable, .	10	16	3	–	29	43·3
,, ,, ,, is indifferent, .	3	1	–	–	4	6·0
ORDER AND CLEANLINESS.						
Number of those in whose schools these are excellent,	1	–	1	2	4	6·0
,, ,, ,, are very good or good,	5	24	6	1	36	53·7
,, ,, ,, are fair or tolerable,	10	11	4	–	25	37·3
,, ,, ,, are neglected, .	–	2	–	–	2	3·0
PROFICIENCY OF PUPILS IN THEIR STUDIES.						
Number of those whose pupils' progress is fully satisfactory,	–	–	–	–	–	–
,, ,, ,, is very good or good,	1	19	6	3	29	43·3
,, ,, ,, is fair or tolerable, .	8	15	5	–	28	41·8
,, ,, ,, is indifferent, .	7	3	–	–	10	14·9

APPENDIX I.

I. Head Inspectors' Reports on Examination of Teachers.

Dr. Patten.

No. 2.—GENERAL REPORT by JAMES PATTEN, Esq., M.D., Head Inspector of National Schools, on the EXAMINATION of MALE and FEMALE TEACHERS, held in the year 1852, in Districts 12, 13, 14, 15, 16, 17, 18, 19, 22 and 25.

March, 1853.

GENTLEMEN,—I have the honour to submit the following Report on the examination and classification of Teachers held during the year 1852, in the ten districts which were placed under my superintendence at the commencement of the year.

Time occupied.—I commenced the examinations on the 4th of August, at Bailieborough, immediately after the public examination of the Model Schools in that town had terminated, and brought them to a close for both male and female Teachers on the 8th of December, at Newry, District 13, after the preliminary examinations of the Model Schools with which I was engaged during the previous week had been completed. It will thus appear that the time occupied in examination and classification of the Teachers, male and female, in the ten districts, was four months and four days; and leaving out Sundays and the days employed in the examination of the Newry District Model School, there will remain nine days on the average for each of the ten districts, examination, classification, preparation of official returns, and travelling included.

Travelling, &c.—The occupation of my time from the commencement of the year up to the 4th of August will be accounted for in my Report on the Inspection of Schools. During the whole of this period I travelled, on exclusively official business, 1,751 miles, at a cost of £34 5*s.* 6*d.* to the Commissioners, being about $4\frac{3}{4}$*d.* per mile on the average. This, I presume, will be considered moderate enough, when it is understood that nearly the half of the districts with which I am connected are situated in the province of Connaught, where, in the absence of railways and other public conveyances, at convenient hours, I was obliged to travel at the ordinary posting rates.

Attendance of Teachers.—The number of male Teachers summoned to attend the written examinations at Easter last amounted to 223. Of these 205 attended, and 18 were absent; and of these the non-attendance of 12 was accounted for in a satisfactory manner.

Number of Teachers examined.—Out of the 205 who attended the written examination 40 were not re-summoned to the oral examination, in consequence of unsatisfactory papers, and 20 were absent from various causes; the number, therefore, who were examined orally amounted to 145.

Number of Probationers promoted, &c., &c.—It will be seen, on reference to the Tabulated Sheets appended, exhibiting the names and grades, &c., that the great majority of the Teachers were probationers, being 103; of these, 53 were deemed wor-

thy of promotion, and 39 remained in their former station, while 11 were recommended to be removed from their office.

Classed Teachers. Number promoted, &c.—Respecting the classed Teachers, 14 were promoted; and it is satisfactory to be able to state, that we found none so badly prepared as to require us to recommend a depression in their classification. Out of the 145 Teachers re-summoned to the oral examination, under the several heads of the General Regulations (See note A, appended), 67, or 20 per cent., received promotion; while 78 were unsuccessful, but remained in their former position. I think it right here to observe that, in some instances, certain Teachers were re-summoned for promotion, whose claims, on the evidence of their written exercises, were extremely doubtful. It has been deemed advisable that the Local Inspector should have a discretionary power in re-summoning *for promotion*, he being the most capable person of expressing an opinion on certain other elements of importance, and necessary to be taken into consideration previously to the recommendation of a Teacher for advancement.—(See Form of Certificate, note B).

Changes in Classification.—The subjoined Table exhibits the rank before, and that obtained after, the examination of the 134 Teachers retained in the service of the Board.

Males. 134 Teachers.	Probationers, Salary, £11.	III.^{2}, Salary, £15.	III.^{1}, Salary, £17.	II.^{2}, Salary, £19.	II.^{1}, Salary, £21.	I.^{3}, Salary, £24.	I.^{2}, Salary, £28.	I.^{1}, Salary, £35.	TOTAL.
As formerly ranked,	92	20	10	4	6	1	1	–	134
As at present, .	46	53	21	7	4	2	1	–	134

134 Male Teachers, amount of present salaries,	£1,951	0	0
134 Male Teachers, amount of former salaries,	1,756	0	0
Increase,	£195	0	0
Average salary at present for each Teacher,	£14	11	2
Average salary formerly for each,	13	2	1
Increase,	£1	9	1

Travelling allowances to Teachers. Males.—An allowance of $2\frac{1}{2}d.$ per mile has been granted by the Commissioners to the Teachers while attending the Examinations, the distance to be reckoned in statute miles from their respective school-houses to the place of examination, and back again, with an additional allowance of 2*s.* per night, in certain cases, for lodging, when the residence of the Teacher was too remote to enable him to return home the same day. The entire cost of the travelling and other expenses of the 134 Teachers amounted to £107 9*s.* 3*d.*, only 14*s.* 9*d.* per man, on the average.

APPENDIX I.

I. Head Inspectors' Reports on Examination of Teachers.

Dr. Patten.

Rates, &c.—From the returns received from the Teachers through the District Inspectors, I find, that of the 145 schools whose Teachers I have examined, the 11,781 children on the rolls up to the 30th June, 1852, were entered at the following rates :—

Not over	1*s.* 1*d.*	per quarter	about	4,117
,,	2*s.* 2*d.*	,,	,,	1,468
,,	3*s.* 3*d.*	,,	,,	181
,,	5*s.* 0*d.*	,,	,,	22
Over	5*s.* 0*d.*	,,	,,	33
At intermediate rates			,,	2,805
As gratuitous		,,	,,	3,155—11,781

From the above it appears that a great deal more than the half are either gratuitous or entered at rates not exceeding 1*s.* 1*d.* per quarter.

School Fees.—I find, also, from the same returns, that for 128 schools the amount of fees received from the children during the year

Was under £5 in 100 cases.
£5, but under £10 in 20 cases.
£10, but under £15 in 8 cases.

In some cases nothing was entered, nor any compensation made in the way of local endowment.

The total amount of school fees received in 121 schools appears to be £345 2*s.* 9*d.* per annum, which would give an average income for each from this source of £2 17*s.* 5*d.*

Salary from the Board.—The average salary at present for each of the 134 Teachers is £14 11*s.* 2*d.* ; school fees about £3 per annum ; local contributions and value of dwelling-houses or land, if any, held rent free, about £2 10*s.* The total annual incomes of the above Teachers, from all sources, appears to be £20 1*s.* 2*d.* on the average ; but it must be remembered that more than the three-fourths are *probationers.*

Attendance of Pupils.—The total average attendance of children at these 121 Schools (for which number only I have received returns), during the year 1852, was 5,260, affording an average to each School of 43 ; and the proportion per cent. of the average attendance to the average number on the rolls throughout the year amounts to 44.

Cost of Education for each Pupil.—I find, on calculating the several items, that the average annual payment for the schooling of each child, from all sources, made to the School, amounts to 7*s.* 10*d.* per annum. The average payment made by the Board alone for each Pupil is 6*s.* 9*d.*, and the average amount from school-fees about 1*s.* 1*d.*

Ages of the Teachers.—Of 121 Teachers, the ages are returned as below:—

32 were under 20 years of age.
48 between 20 and 30 ,,
29 between 30 and 40 ,,
10 between 40 and 50 ,,
2 of 50 years and above.

The average age for each being 26½ years, nearly.

Educated at National Schools.—Nearly the two-thirds are returned as having received all or some portion of their education at a National School.

Trained and Untrained.—Only 35, or 1 in 4, nearly, have been trained; this, however, is readily accounted for, when it is recollected that about the two-thirds of the total number examined were Probationers.

Supply of School Requisites, &c.—The amount of books and other school requisites purchased during the 12 months, by the Teachers of these 121 Schools, is returned as £159, which gives an average supply for each School of £1 6*s.* 3*d.* in value.

Examination in Writing.—In the tabulated particulars respecting the written exercises, I have recorded the results regarding all who attended, as well as those who were recalled to the Oral Examination, where, in the case of certain candidates for promotion not being resummoned, the reason will be seen for dispensing with their further examination.

It will not be surprising to find that, of 134 Teachers, 92 of whom being Probationers, the results of the answering, particularly on Paper C, as summed up in Table A, appended, do not exhibit very great proficiency. It appears from the Table, that 25 per cent. of the questions in Series A have been answered in a satisfactory manner, and 21 per cent. imperfectly. The satisfactory answers given in Series B are 17 per cent., and the imperfect answers 17 per cent. On Series C, 15 per cent. of the questions were answered in a satisfactory manner by a small portion of the Third Class and the Probationers, and 20 per cent. imperfectly.

Comparison of the above with the answering in 1850.—On comparing these returns with those published in 1850, we will find that the satisfactory answers, on that occasion were 17 per cent. higher on Series A, and 6 per cent. higher on Series B. On Series C, the satisfactory answers were 19·5 per cent., and the imperfect 28·9, which exhibits a slight superiority in the satisfactory answers, but an inferiority in the per centage of the imperfect answers to that received last year. This is just the result we had reason to expect, from the difference in the grades of Teachers examined in the two respective years.

Probationers and portion of Third Class Examined on Series C.—While the answering of the above appears to be superior to that of 1850, in Arithmetic, Money-matters, and Book-keeping, it is inferior in Grammar, nearly equal in Geography, but much inferior in the Lesson Books. This last defect is caused, perhaps, by the large number of Probationers who have been only recently appointed. On Series B, for the Second-Class Teachers, the answering was equal to that of 1850, on the following subjects:—Grammar, Money-matters, Algebra, Geometry, Book-keeping, and Natural Philosophy. The failure on the above subjects, in 1850, was to be ascribed, in a great measure, to the Teachers' attempting to answer

APPENDIX I.

I. Head Inspectors' Reports on Examination of Teachers.

Dr. Patten.

every question; and, in consequence, being obliged, at the end of the day, to pass over many of the most important subjects unattempted. This practice has now nearly disappeared, and, at the beginning of the day, they attempt the questions on *all* the subjects which they think they are able to answer, and then return to the more difficult.

For further particulars respecting the Written Examination, and the memoranda to be observed in conducting the same, see *Note D*, appended.

Oral Examination.—As regards *Reading*, there were 41·5 per cent. who read with judgment and intelligence. Those who read with tolerable fairness, or the medium class, appear, from the Table (see Table B, appended), to be 47 per cent.; and, those, again, whose reading was indifferent or bad, 9·5 per cent. In my report of the examination in reading for 1850, I find that the three classes of readers respectively stand as follows:—good, 24 per cent.; medium or tolerable, 54; and the indifferent or bad, 22 per cent. Thus it appears that some falling-off has taken place in the upper classes, but a very decided improvement in the lower, where the bad readers have fallen from 22 to 9 per cent.

Rules of Spelling and Principles of Pronunciation.—On the above subjects the Table exhibits a fair amount of proficiency, and will bear a favourable comparison with the answering of 1850 on these important subjects, the good, medium, and bad answers being respectively, 29, 40, and 27 per cent. At the Examination in 1850 they stood thus—19, 60, and 20 per cent.

Arithmetic.—In the Oral Examination on this important branch of education, we observe results equally favourable as those already noticed in the tabular summaries of the examination in writing—the good, fair, and indifferent answers being 27, 55½, and 12 per cent. respectively.

Grammar, Geography, and Maps, History, &c., &c.—For information respecting the answering on the above subjects and others, I beg to refer to Table B, which exhibits a summary of the details with considerable minuteness.

Lesson Books.—As this is a subject of very great interest, I shall give a brief notice of the comparative answering between the years 1850 and 1852. On the former occasion, 47 per cent. were marked as deficient, and 4½ as bad; while at the last examination, 63 per cent. were marked as fair, and 24 per cent. only as poor or deficient.

State of Schools.—With reference to the state of the schools, as regards organization, discipline, proficiency of the pupils, order and cleanliness, &c., I beg again to refer to the summary of details, as given in Table C, appended.

EXAMINATION OF FEMALE TEACHERS.

Attendance.—Ninety-two Female Teachers were summoned to these examinations throughout the ten districts, and of

these 88 attended—the absence of four having been accounted for in a satisfactory manner. Of the 88 whom I examined, 63 were probationers; and 17, or 24 per cent., only, were trained. Of the entire number, 38, or 43 per cent., were promoted; one only was dismissed as incompetent, and 49 were allowed to remain in their former classification. Of the 38 who received an advance, 33 were probationers: three of the 3rd, and two of the 2nd Classes.

Examinations, how Conducted, &c.—The written and oral examinations were completed on two consecutive days, as on former occasions; the first day being entirely devoted to the written exercises, and the second to the oral examination.

General Results of the Examinations.

Examinations in Writing.—In Table D of the Appendix, I have given a summary of the details of the written exercises, where it will be seen that the results differ materially in some respects from those obtained at the former examination, and published in my last Report. The answering on Series A, for the 1st Class, was, on the aggregate, for all the subjects, 16 per cent. higher, while on Series B, for the 2nd Class, the per centage on the whole was 7 per cent. less. On Series C, for the probationers and some portion of the 3rd Class, about 7 per cent. less, likewise.

Oral Examination.—In Appendix (E) I have given a summary, or synoptical table of the answering on the several subjects in considerable detail. On comparing these results with those obtained in 1850 it will be observed, that in regard to Reading *with judgment and intelligence*, the per centage rises from 38·2 to 53·3 per cent.; and the *good answers* on Grammer from 35 to 45 per cent., while there was a falling off on the *bad and indifferent* answers from 21 to 10 per cent. There is some improvement also in Geography; and the marks for Arithmetic and Writing appear equally favourable.

State of School, Organization, &c., &c.—In Table (F) I have given a summary of the general state of the schools, of the Teachers examined, the extent of instruction, the proficiency of the pupils, order and cleanliness, &c., which, I believe, will be found, on the whole, to be tolerably fair.

Attendance of Pupils.—In the case of 78 schools, the average attendance is returned as 2,728, which would give an average to each school of 35 pupils; and the proportion, per cent. which the average daily attendance bears to the average number on the rolls is 49·8, or 50 nearly.

School Fees and Rates of Payment.—Of the 48 schools for which returns have been received, it appears that there were on their rolls, at the end of June 1852, 4,047 pupils, and of this number there were entered—

At rates not above 1*s.* 1*d.*, . . .	1,653	
,, not above 2*s.* 2*d.*, . . .	162	
,, not above 3*s.* 3*d.*, . . .	15	
At intermediate rates, ...	368	
As gratuitous, ...	1,849	4,047

APPENDIX I.

I. Head Inspectors' Reports on Examination of Teachers.

Dr. Patten.

	£	s.	d.
The average amount paid to each Teacher from school fees, during the year, in the case of 61 schools, appears to be about .	2	1	9
And that from local contributions, during the same period, ...	1	1	5
Value of residences, &c., held rent-free, .	1	4	0
Average yearly salary, from Board, . .	12	0	0
Average total income of Teachers, from all sources, ...	16	7	2

Which is 10*s.* 3*d.* more, on the agregate, than that returned for 1850.

Average Age and Period of Service under the Board.—The average age seems to be 23½ years, and the average period of service, under the Board, about 3 years. Of 66 Teachers, 42 received either all or some portion of their education at National Schools.

Supply of Books and School Requisites.—The amount of school requisites, at half price, purchased by the Teachers of 65 schools, for sale to their pupils, during the year ending June 1852, is returned as £40 9*s.* 6*d.*, which affords an average supply to each school of 13*s.* 10*d.*, in value.

School Management.—In school keeping and school management, the Teachers, both male and female, are, in many respects, deficient. At the examinations there is seldom time to do more than take a cursory view of these important subjects, with a few questions on the rules and regulations of the Commissioners, the method of keeping the school accounts, and some points connected with the best mode of teaching some of the more important branches. The best, and, indeed, the only effective remedy, I think, would be to furnish each of the Teachers with a proper hand-book on the principles and practice of teaching, and on the theory of education.

I have the honour to be, Gentlemen, your obedient servant,

JAMES PATTEN,
Head Inspector.

The Secretaries,
Education Office.

TABLE A. (*Dr. Patten's Report.*)—Examination of Male Teachers in 1852 (in 10 Districts). Synopsis of the Examination in Writing of the Male Teachers, extracted from the Tabulated Particulars.

	Grammar.	Geography	Money Matters.	Arithmetic.	Algebra and Geometry.	Mensuration.	Book-keeping.	Lesson Books.	History.	Lessons on Reasoning.	Natural Philosophy.	Total.	Per Cent.
SERIES A.													
Number of questions,	6	6	3	5	6	6	2	7	5	4	9	59	–
Number of Teachers examined on these papers,	12	12	12	12	12	12	12	12	12	12	12	12	–
Number of answers which might have been received,	72	72	36	60	72	72	24	84	60	48	108	708	–
Number of answers marked "satisfactory,"	34	16	6	11	16	11	6	33	12	16	26	187	25
Number of answers marked "imperfect,"	21	24	15	8	19	4	5	13	17	9	17	152	21·4
Number of answers received on an average instead of 20,	15·0	11·0	11·6	6·0	9·6	4·1	9·0	11·2	9·7	10·4	8·0	9·7	–
SERIES B.													
Number of questions,	6	5	4	6	6	6	2	7	5	3	8	58	–
Number of Teachers examined on these papers,	32	32	32	32	32	32	32	32	32	32	32	32	–
Number of answers which might have been received,	192	160	128	192	192	192	64	224	160	96	256	1,856	–
Number of answers marked "satisfactory,"	71	26	42	62	29	10	5	23	18	13	17	316	17
Number of answers marked "imperfect,"	52	47	23	40	22	13	4	43	38	9	25	316	17
Number of answers received on an average instead of 20,	12·8	9·1	10·2	10·6	5·3	3·0	3·0	5·8	7·0	4·5	3·3	6·8	–
SERIES C.													
Number of questions,	7	6	3	9	–	5	2	6	–	–	–	38	–
Number of Teachers examined on these papers,	161	161	161	161	–	161	161	161	–	–	–	161	–
Number of answers which might have been received,	1,127	966	483	1,449	–	805	322	966	–	–	–	6,118	–
Number of answers marked "satisfactory,"	201	85	49	394	–	71	21	101	–	–	–	922	15
Number of answers marked "imperfect,"	292	298	95	239	–	46	15	270	–	–	–	1,255	20·5
Number of answers received on an average instead of 20,	8·7	8·0	6·0	8·7	–	3·0	2·2	7·7	–	–	–	7·1	–

TABLE B. (*Dr. Patten's Report.*)—Summary of the Details of the Oral Examination of Male Teachers, held in Districts Nos. 12, 13, 14, 15, 16, 17, 18, 19, 22, and 25, in the year 1852.

	Probationers.	Third Class.	Second Class.	First Class.	Total	Per cent.
READING.						
Number who read with taste and expression, .	1	1	–	1	3	2·04
,, ,, with judgment and intelligence,	35	17	7	2	61	41·5
,, ,, with tolerable fairness, . .	57	8	4	–	69	46·93
,, ,, indifferently, ...	13	1	–	–	14	9·52
	106	27	11	3	147	–
PARSING.						
Number whose style of parsing was very superior,	3	1	–	–	4	2·72
,, ,, was good, ...	22	11	5	2	40	27·21
,, ,, was pretty fair, . . .	46	11	6	1	64	43·53
,, ,, was poor, ...	35	4	–	–	39	26·53
	106	27	11	3	147	–
GRAMMAR.						
Number whose answering was very superior, .	3	–	–	–	3	2·04
,, ,, was good, ...	24	11	6	2	43	29·25
,, ,, was pretty fair, . . .	43	12	4	1	60	40·81
,, ,, was poor, ...	36	4	1	–	41	27·89
	106	27	11	3	147	–
ETYMOLOGY, DERIVATIONS, &c.						
Number whose answering was very superior, .	1	2	–	1	4	2·72
,, ,, was good, ...	13	12	6	1	32	21·76
,, ,, was pretty fair, . . .	29	9	2	1	41	27·89
,, ,, was poor, or bad, . . .	36	2	3	–	41	27·89
,, ,, was very bad, . . .	27	2	–	–	29	19·72
	106	27	11	3	147	–
SPELLING-BOOK SUPERSEDED, AND PRINCIPLES OF PRONUNCIATION.						
Number whose answering was excellent, . .	4	1	–	1	6	4·08
,, ,, was good, ...	26	12	5	2	45	30·61
,, ,, was pretty fair, . . .	36	10	4	–	50	34·01
,, ,, was poor, ...	34	2	2	–	38	25·85
,, ,, was very bad, . . .	6	2	–	–	8	5·44
	106	27	11	3	147	–

Summary of Oral Examination of Male Teachers—*continued.*

	Probationers.	Third Class.	Second Class.	First Class.	Total.	Per cent.
Outline Maps.						
Number whose answering was excellent, . .	3	4	2	3	12	8·16
,, ,, was good, ...	32	8	4	–	44	29·93
,, ,, was pretty fair, . . .	41	12	4	–	57	38·77
,, ,, was poor, ...	28	3	1	–	32	21·76
,, ,, was very bad, . . .	2	–	–	–	2	1·36
	106	27	11	3	147	–
Geography—Descriptive and Generalized.						
Number whose answering was excellent, .	–	–	2	2	4	2 72
,, ,, was good, ...	25	13	1	1	40	27·21
,, ,, was pretty fair, . . .	56	11	8	–	75	51·02
,, ,, was poor, ...	25	3	–	–	28	19·04
	106	27	11	3	147	–
History.						
Number whose answering was very superior, .	2	1	1	2	6	14·2
,, ,, was good, ...	2	–	1	3	6	14·2
,, ,, was pretty fair, . . .	–	5	7	–	12	28·5
,, ,, was poor, ...	13	3	2	–	18	43·0
	17	9	11	5	42	–
Easy Lessons on Money Matters.						
Number whose answering was excellent, . .	–	1	–	–	1	0·68
,, ,, was good, ...	8	5	2	1	16	10·88
,, ,, was pretty fair, . . .	44	11	7	2	64	43·53
,, ,, was poor, ...	46	9	2	–	57	38·77
,, ,, was very bad, . . .	8	1	–	–	9	6·12
	106	27	11	3	147	–
Easy Lessons on Reasoning.						
Number whose answering was very good, . .	–	–	–	1	1	3·6
,, ,, was good, ...	–	2	3	2	7	26·0
,, ,, was pretty fair, . . .	–	5	5	–	10	27·0
,, ,, was poor, ...	–	4	3	2	9	33·3
	–	11	11	5	27	–
Lesson Books.						
Number whose answering was very superior, .	–	–	–	4	4	3·1
,, ,, was good, ...	2	4	2	3	11	8·7
,, ,, was pretty fair, . . .	53	19	8	–	80	63·6
,, ,, was poor, ...	26	4	1	–	31	24·6
	81	27	11	7	126	–

Summary of Oral Examination of Male Teachers—*continued.*

	Probationers.	Third Class.	Second Class.	First Class.	Total.	Per cent.
Arithmetic.						
Number whose answering was excellent,	–	2	2	1	5	3·40
,, ,, was good,	25	11	3	1	40	27·21
,, ,, was pretty fair,	64	11	6	1	82	55·78
,, ,, was poor,	15	3	–	–	18	12·24
,, ,, was very bad,	2	–	–	–	2	1·36
	106	27	11	3	147	–
Algebra and Geometry.						
Number whose answering was very superior,	–	–	2	–	2	9·5
,, ,, was good,	–	1	2	3	6	28·6
,, ,, was pretty fair,	–	1	6	–	7	33·3
,, ,, was poor,	–	5	1	–	6	28·6
	–	–	1	3	21	–
Mensuration.						
Number whose answering was excellent,	–	1	1	–	2	3·0
,, ,, was good,	6	6	5	2	19	29·0
,, ,, was tolerable,	23	7	4	1	35	50·2
,, ,, was poor,	9	2	2	–	13	20·3
	38	16	12	3	69	–
Natural Philosophy.						
Number whose answering was very superior,	–	–	1	–	1	4·6
,, ,, was good,	–	2	2	2	6	27·7
,, ,, was tolerable,	–	3	5	1	9	40·9
,, ,, was poor,	–	3	3	–	6	27·7
	–	8	11	3	22	–
Book-keeping.						
Number whose answering was very superior,	–	–	–	–	–	–
,, ,, was good,	8	2	2	2	14	18·0
,, ,, was tolerable,	27	11	5	1	44	56·4
,, ,, was poor,	17	2	1	–	20	25·6
,, ,, was very bad,	–	–	–	–	–	–
	52	15	8	3	78	–

TABLE C. (*Dr. Patten's Report.*)—Summary of Returns of District Inspectors. Examination of Male Teachers, 1852.

134 Male Teachers.	Probationers.	Third Class.	Second Class.	First Class.	Total.	Per cent.
METHOD OF TEACHING.						
Number of those whose method is in every way satisfactory,	–	3	2	2	7	5·3
,, ,, ,, is good,	14	14	5	1	34	25·5
,, ,, ,, is pretty fair,	52	10	3	–	65	48·4
,, ,, ,, is very poor,	27	–	1	–	28	20·8
	93	27	11	3	134	100·0
EXTENT OF INSTRUCTION.						
Number of those whose course is very superior,	–	1	3	2	6	4·4
,, ,, ,, is good,	6	15	5	3	29	21·7
,, ,, ,, is fair,	20	45	5	–	70	52·7
,, ,, ,, is poor,	20	8	1	–	29	21·7
	46	69	14	5	134	100·0
DISCIPLINE.						
Number in whose Schools it is very good,	–	2	4	6	12	8·7
,, ,, ,, is good,	6	33	8	1	48	35·8
,, ,, ,, is tolerable,	28	36	4	–	68	50·9
,, ,, ,, is bad,	4	2	–	–	6	4·4
	38	73	16	7	134	100·0
PROFICIENCY OF PUPILS IN THEIR STUDIES.						
Number of those whose Pupils' progress is altogether satisfactory,	–	2	1	2	5	3·7
,, ,, ,, is very good,	1	4	6	13	24	17·9
,, ,, ,, is fair,	4	46	4	2	56	41·0
,, ,, ,, is indifferent,	25	24	–	–	49	37·3
	30	76	11	17	134	100·0
ORDER AND CLEANLINESS.						
Number of those in whose School these are excellent,	–	2	4	2	8	5·9
,, ,, ,, are very good,	8	28	6	2	44	32·9
,, ,, ,, are fair,	26	47	2	1	76	56·8
,, ,, ,, are neglected,	4	2	–	–	6	4·4
	38	79	12	5	134	100·0

TABLE D. (*Dr. Patten's Report.*)—Examination of Female Teachers in the Year 1852 (in 10 Districts). Summary of Particulars of the Examination in Writing; extracted from the Tabulated Particulars.

	Female Teachers examined on these Branches.				
	Grammar.	Geography.	Arithmetic.	Lesson Books.	Total.
SERIES A.					
Number of Questions,	6	6	5	4	21
Number of Teachers examined on these papers,	5	5	5	5	5
Number of answers which might have been received,	30	30	25	20	105
,, marked satisfactory,	12	11	10	12	45
,, marked imperfect,	11	10	3	2	26
,, received on an average instead of 20,	14·6	14·0	10·4	14·0	13·5
SERIES B.					
Number of Questions,	6	5	5	5	21
Number of Teachers examined on these papers,	10	10	10	10	10
Number of answers which might have been received,	60	50	50	50	210
,, marked satisfactory,	23	11	14	13	61
,, marked imperfect,	20	22	12	10	64
,, received on an average instead of 20,	14·3	13·2	10·4	9·2	12·0
SERIES C.					
Number of Questions,	4	6	6	4	20
Number of Teachers examined on these papers,	72	72	72	72	72
Number of answers which might have been received,	288	432	432	288	1,440
,, marked satisfactory,	120	85	132	59	396
,, marked imperfect,	103	129	86	88	406
,, received on an average instead of 20,	15·1	9·9	10·0	10·2	11·2

TABLE E. (*Dr. Patten's Report.*)—Examination of Female Teachers in 1852 (in 10 Districts). Summary of the Results of the Oral Examination.

Female Teachers examined on the following Branches.	Probationers.	Third Class.	Second Class.	First Class.	Total.	Per cent.
READING.						
Number who read with taste and expression,	8	–	2	2	12	14·1
,, ,, judgment and intelligence,	33	9	4	1	47	55·3
,, ,, with tolerable fairness, .	18	3	–	–	21	24·7
,, ,, indifferently, . . .	4	1	–	–	5	5·8
Total, . . .	63	13	6	3	85	–
RULES OF SPELLING AND VERBAL DISTINCTIONS.						
Number whose answering was very superior,	–	–	–	–	–	–
,, ,, good, . . .	21	4	4	3	32	37·6
,, ,, pretty fair, . .	31	6	2	–	39	45·8
,, ,, poor, ...	11	3	–	–	14	16·4
Total, . . .	63	13	6	3	85	–
GRAMMAR.						
Number whose answering was very superior,	4	–	–	1	5	5·8
,, ,, good, . . .	27	5	6	1	39	45·8
,, ,, pretty fair, . .	24	7	–	1	32	37·6
,, ,, poor, ...	8	1	–	–	9	10·5
Total, . . .	63	13	6	3	85	–
GEOGRAPHY.						
Number whose answering was very superior,	4	–	–	1	5	5·8
,, ,, good, . . .	21	8	5	2	36	42·3
,, ,, pretty fair, . .	36	4	1	–	41	48·2
,, ,, poor, ...	2	1	–	–	3	3·4
Total, . . .	63	13	6	3	85	–
LESSON BOOKS.						
Number whose answering was very superior,	–	–	–	–	–	–
,, ,, good, . . .	9	1	2	1	13	15·3
,, ,, pretty fair, . .	39	9	4	2	54	63·5
,, ,, poor, ...	15	3	–	–	18	21·2
Total, . . .	63	13	6	3	85	–

Summary of Oral Examination of Female Teachers—*continued.*

Female Teachers examined on the following Branches.	Probationers.	Third Class.	Second Class.	First Class.	Total.	Per cent.
Arithmetic.						
Number whose answering was very superior,	2	–	–	–	2	2·3
,, ,, good, . . .	19	6	1	3	29	34·1
,, ,, pretty fair, . .	33	5	5	–	43	50·6
,, ,, poor, ...	9	2	–	–	11	13·0
Total, . . .	63	13	6	3	85	–
Writing.						
Number whose style of writing was excellent,	3	–	1	–	4	4·7
,, ,, good, . . .	27	6	3	3	39	45·8
,, ,, pretty fair, . .	27	7	1	–	35	41·1
,, ,, poor or indifferent, .	6	–	1	–	7	8·2
Total, . . .	63	13	6	3	85	–
Character of School, &c. &c.						
Number whose Schools were very superior,	–	–	3	3	6	7·5
,, ,, good, . . .	10	9	6	1	26	30·6
,, ,, pretty fair, . .	29	7	2	–	38	43·5
,, ,, poor, ...	9	5	1	–	15	17·6
Total, . . .	48	21	12	4	85	–

Note A.

Examination of Teachers.—General Regulations.

I. It is intended that a general examination of the Teachers shall take place every fifth year. (The first general examination for male Teachers having taken place in 1848, the second will be held in the current year, 1853. The ordinary special examination for female Teachers will take place this year, as usual.)

II. That a special examination shall be held in each of the intervening years.

III. That at these special examinations there will be required to attend—

1st.—All candidates for promotion.

2nd.—All probationers.

3rd.—Teachers who may have been absent from the examination to which they had been previously summoned.

4th.—Those whose answering at such previous examination may have been unsatisfactory.

5th.—Those whom the District Inspector may think proper, for special reasons, to summon.

"☞ *No Teacher will be admitted to examination with a view to promotion, on whose school a decidedly unfavourable report has been made by the District Inspector within the previous year.*

"Teachers will not be eligible for promotion, unless, in addition to satisfactory answering in the course prescribed for the class to which they aspire, it appears from the reports of their respective District Inspectors, that their schools are properly organized and well conducted, that adequate exertions have been made by them to keep up a sufficient average attendance; that their junior classes are carefully taught, and that a fair proportion of the pupils of the higher classes, besides being proficients in the ordinary branches of Reading, Spelling, and Writing, are possessed of a respectable amount of knowledge in, at least, Grammar, Geography, and Arithmetic. In female schools it will be further requisite that instruction in plain Needlework, including sewing, knitting, and cutting out, be given to all girls capable of receiving it, and that they exhibit a due proficiency in this department.

"It must also appear from the reports of their Inspectors, that their school accounts have been regularly and correctly kept, that their schools and school premises have been preserved with neatness and order, and that cleanliness in person and habits has been enforced on the children attending them."

IV. Trained Teachers, except at their own request, and with the sanction of the District Inspector, will not be required to attend any examination that may be held during the three years subsequent to the date of their classification by the Professors at the expiration of the course of training.

V. National Teachers, forty-five years of age and upwards, who have served under the Board for a period of not less than fifteen years, or Teachers who have attained fifty years of age, and served not less than ten years, will not be required to attend any examination, provided they have been already

APPENDIX I.

I. Head Inspectors' Reports on Examination of Teachers.

Dr. Patten.

examined and classed by the Professors, or a Board of Inspectors.

VI. As the Commissioners have decided that *Teachers must remain two years in a lower class before they are eligible for promotion to a higher,* the candidates for examination, with a view to promotion, must, each year, be restricted to those who come under this condition. With this restriction, however, it is to be understood that deserving Teachers may at the second, and all subsequent examinations, as well as at the first, be promoted from any division of one class to any division of a higher (except untrained Teachers, who cannot be placed in the first class), without requiring them to pass through intermediate divisions.

VII. Teachers who may have absented themselves, without satisfactory reason assigned, from the examinations of previous years, will be liable to be dismissed should they not present themselves when again summoned.

All Teachers also who may be *specially* summoned, and who shall be absent without a sufficient reason, will be liable to be fined or depressed.

VIII. The written part of the examination for male Teachers, which will occupy one whole day, will be held by the District Inspector, in Easter week, at such central point in his district as he may think proper to fix upon.

IX. The period for the oral examination of the male Teachers, and for the examination of the female Teachers, will be afterwards appointed; these examinations to be conducted by a Head Inspector, aided by the Inspector of the District.

X. It is required that all those who may seek to become candidates for promotion within the limits laid down, shall intimate to the District Inspector, before the 15th March, that such is their wish, and he will inform them whether they may present themselves for examination.

NOTE.—Every National Teacher will be furnished, on application to the District Inspector, with a copy of the programme of the course of study, in which is stated the minimum of proficiency required for each class.

NOTE B.—DISTRICT ——.

MALE TEACHERS.

Certificate for Teachers already classified, who attended at written Examination as Candidates for promotion.

I certify that the Teachers whose names are annexed have their schools properly organized and well conducted;

That adequate exertions have been made by them to keep up a sufficient average attendance;

That their junior classes are carefully taught, and that a

fair proportion of the pupils of the higher classes, besides being proficients in the ordinary branches of Reading, Spelling, and Writing, are possessed of a respectable amount of knowledge in Grammar, Geography, and Arithmetic;

And further, that their school accounts have been regularly and correctly kept;

That their schools and school-premises have been preserved with neatness and order;

And that cleanliness in person and habits has been enforced on the children attending them.

——— District Inspector.

Date, ———

N.B.—This return is to be forwarded to the Secretaries within a *fortnight* from the day on which the written exercises take place.

Note C.—District ———.

Female Teachers.

Certificate for Teachers already classified, who attended at written Examination as Candidates for promotion.

I certify that the Teachers whose names are annexed have their schools properly organized and well conducted;

That adequate exertions have been made by them to keep up a sufficient average attendance;

That their junior classes are carefully taught, and that a fair proportion of the pupils of the higher classes, besides being proficients in the ordinary branches of Reading, Spelling, and Writing, are possessed of a respectable amount of knowledge in Grammar, Geography, and Arithmetic;

That instruction in plain Needlework, including sewing, knitting, and cutting-out, is given to all girls capable of receiving it, and that they exhibit a due proficiency in this department;

And further, that their school accounts have been regularly and correctly kept;

That their schools and school-premises have been preserved with neatness and order; and that cleanliness in person and habits has been enforced on the children attending them.

——— District Inspector.

Date, ———

Note D.

Memoranda to be observed in the Written Examination.

Docket.—This is to be filled up carefully the first thing after the Teachers have taken their seats, and is to be attached afterwards to their papers.

Written Exercises.—These to be given on *separate half sheets,*

or single leaves; each half sheet or leaf to have written at top the name of the Teacher, and that of his school; to be written on *one side only*. In the same leaf or page no more than one subject to be entered on, and each answer to be separated from the next following by a black line drawn right across from side to side of page. The subject of the questions to be written in large characters immediately under the Teacher's name at top.

Margin.—A margin of one inch and half to be marked off on left hand side of each leaf, and nothing to be written therein except the numbers of the questions, and the words of the parsing exercise.

Style of Answers.—*Yes* or *no* is not to be taken for an answer, unless accompanied with some development or expansion of the thought; and in Algebra, Arithmetic, and Mensuration, the whole work must be transferred to the paper, if previously wrought out on slate, and not the *result* or *answer merely*.

Printed Questions.—The first half sheet or page of each paper to be given out for the morning's sitting, and the second after re-assembling; and while it is not necessary that all should be attempted, it is expected that some questions at least upon *each* subject will be answered. The first sitting may extend from ten to half-past one o'clock, and the second from two or half-past two to five o'clock. The papers given out in the morning are to be taken up by the Inspector at half-past one o'clock, with the answers furnished thereto by the Teachers, and are not to be *again given to them*.

Conduct of Teachers.—No books, prepared notes, or manuscripts of any kind to be allowed in the hands of the Teachers; no prompting or conversation among them; nor any questions permitted except those which may be addressed to the Inspector. As a *general rule*, no one to leave the room during the examination, except at intermission; but should any be obliged, the paper he may be engaged on is to be given up before going out, and is not afterwards to be restored, *or the subject of it again taken up*.

Paper C is for candidates for third class, and for those who, already in it, seek its higher division; B is for candidates for second class, and for those who, already in it, seek only its higher division; A is for candidates for admission to first class or promotion in it.

In noting the answers, the following marks in *red ink*, to be used for the sake of uniformity, viz.:—"*satisfactory*," "*imperfect*," or "*unsatisfactory*," as the case may be, including under the last head answers either wholly wrong or so defective as not to admit of being ranked under the second.

Note.—These marks should be entered in the *margin*, immediately under the number of the question to which the answer refers. All bad spelling should be marked thus (I) in *red ink* wherever observed throughout the exercises, and a list of the words thus misspelled given at the close of each Teacher's papers, and all grammatical errors should be *under-scored*.

No. II.—Questions (to be answered in writing) proposed at the Examinations in 1852.

No. 1.—Male Teachers.

A.

Grammar.

Me, though just right and the fixed laws of heaven
Did first *ordain* your *leader*, next free *choice*,
With *what* besides in council or in fight
Hath been achieved of merit, yet this loss,
Thus far at least *recover'd*, hath much more
Establish'd in a safe unenvied throne,
Yielded with full consent.

1. Parse in the above the words marked in *italics*.
2. Write down lists of Adverbial and Conjunctional phrases.
3. State, with examples, the difference between a logical proposition and a grammatical sentence.
4. Write down *ten* of the principal endings affixed to Adjectives formed from Substantives, and give examples.
5. What is meant by the superlative of eminence? Give examples.
6. How is it shown that the words are Arbitrary and not Natural signs? Explain, with examples, the nature of each, and state what class of words appears to you to partake most of the character of natural signs, and why?

Geography.

1. Describe fully the chief diurnal phenomena during an entire year.
2. Give a sketch of the general geography of the countries lying round the Levant, especially of those of more important historical interest.
3. With the aid of a terrestrial globe, or with a Map of the World, having the equator and ecliptic graduated on them, and the sun's place given for each day, how do you find the difference between *mean* (as shown by a clock) and *apparent* time (as shown by a sun-dial)? Explain the principle involved in the method you follow.
4. Give a condensed outline of the comparative *littoral*, or sea-coast, configuration of Europe and America, with the special influences arising from it in each continent.
5. It is shown that if the Torrid Zone be divided into three equal parts, each of the outer parts would enjoy three-and-half times as much heat and sun-light as the middle portion; explain how this is effected, and state the design of this provision.
6. Name the chief seats of manufacturing industry in the United Kingdom, with the special branch for which each is most remarkable. State also how far any of them is connected with the natural productions of the locality.

Appendix I.

II. Questions proposed at the Examinations.

Male Teachers.

History.

1. Enumerate the various circumstances from which it may be inferred that in the days of Solomon the arts must have been in a flourishing condition.

2. Name the Sovereigns of the House of Stuart who reigned in England, with the years of their accession to the throne; and give a brief sketch of the reign of *one* of them.

3. Give a short account of the reign and death of Uzziah, king of Judah.

4. Relate the occurrences in Judea in the time of Antiochus Epiphanes.

5. Give some account of the events that took place in the reign of Justinian.

Lessons on Money Matters.

1. Whether does a standing army or a militia constitute the more efficient and economical means of defence?

2. If the former, on what principle of political economy is your answer founded? If the latter, give your reasons.

3. A pound of crude iron, costing one halfpenny, made into steel, and then into hairsprings for watches, produces about £35,000. Is it *because* of the labour bestowed on it that this increase in value takes place; or if not, how do you account for it?

Lessons on Reasoning.

1. When reasoning from Analogy, what is the difference in argumentative force between *real* and *invented* examples? Illustrate by instances.

2. What is the universal law or necessary condition of Logical Conversion? Explain what is meant by this.

3. Explain the difference between Analogy and Resemblance, and illustrate by examples.

4. Name the *fallacy* involved in the following sophism, and explain its nature:

Three and two are even and odd,
Three and two are five,
Therefore five is even and odd.

Lesson Books.

1. Give a short outline of Captain Basil Hall's narrative of his voyage to the Loo-Choo Islands, particularly the part relating to the formation of Coral Reefs.

2. Explain the manner, according to another navigator, in which, after being raised up, the Coral Islands gradually acquire a soil and vegetation.

3. In the case of Concave Mirrors, when the incident rays proceed from a focus, name the course of the reflected rays; and when the incident rays are parallel, what will be the course of the reflected rays?

4. What is the readiest method of ascertaining the specific gravity of six cubic inches of atmospheric air?

5. In how many ways is heat communicated from one body to another? Give examples.

6. How do you show that the absence of organic remains in the primary strata is *no proof* that they might not previously have existed?

7. What are the marks of adaptation in the digestive organs of animals to their nature and habits?

ARITHMETIC.

1. Find two geometrical means between 10 and 100, and two arithmetical means between 1 and 2; and show that the four terms of the arithmetical series thus obtained are the logarithms of the corresponding terms of the geometrical series.

2. Prove that the logarithms of two numbers consisting of the same digits, can differ only in the characteristic.

3. The square root of 7 is 2·645751 . . . . ; write down three decimals whose roots can be at once inferred from this, and write these roots.

4. Show that the quotient of the division of a number by 73 is very nearly equal to the 100th part of the sum obtained by adding together the given number, its *third* part, the *tenth* of this third, and the *tenth* of this tenth.—Hence deduce the the rule which Thomson gives for dividing by 73000.

5. The sixteenth term of an increasing equirational series is 32768, and its ratio is 2; find the first term.

ALGEBRA.

1. A principal £P amounted to £A in n months, simple interest: required the rate per cent.

2. Divide 1 into mean and extreme ratio.

3. Find the first four terms of the quotient of 1 by $1 + x$ in descending powers of x: show how the *general* term will be expressed, and also the fractional part of the quotient.

4. Required the cube of $a+b\sqrt{-1}$.

5. I paid £3 for a certain number of hats: had I got three more for that sum each would have cost one shilling less. How many hats did I buy, and what explanation do you give of the negative result.

6. Solve the following simultaneous equations:

$$x+y=a$$
$$x^3+y^3=b.$$

GEOMETRY AND MENSURATION.

1. Show why is it that in geometrical reasoning although it is the proposition in its *particular* enunciation that we prove, yet we conclude from the particular that the proposition in its *general* enunciation is also established.

APPENDIX I.

II. Questions proposed at the Examinations.

Male Teachers.

2. Show that in a plane triangle, if A, B, C represent the three angles, and a, b, c, the respective opposite sides,

$$a = \sqrt{(b^2 + c^2 - 2\,b\,c\cos A)}.$$

3. Explain fully, and by a diagram, how you would continue the measurement of a line impeded by an object, such as a pond, which does not obstruct the sight, but which impedes the chaining of the line.

4. If an equilateral triangle be inscribed in a circle, and the adjacent arcs cut off by two of its sides be bisected, the line joining the points of bisection will be trisected by the sides.

5. Using the same notation as before, prove the formula :—

$$\text{Sin B} = \frac{b \sin A}{\sqrt{(b^2 + c^2 - 2\,b\,c\cos A)}}$$

6. An elliptical lake of 2 statute acres in area, and whose transverse axis shall be 24 perches, is to be formed in a demesne ; required the length of the conjugate axis, and explain how you would proceed to construct the figure in the demesne.

NATURAL PHILOSOPHY.

1. The diameter of the cylinder of a steam engine is 37 inches, the length of the stroke 76 inches, the number of strokes per minute 27, and the horse-power 100 ; what is the pressure per square inch.

2. Describe what is meant by the aberration of light, and account for the change in the apparent places of the fixed stars.

3. Write out the following question, and fill up the blanks : The caloric sufficient to melt a given weight of ice would raise the same quantity of water through degrees ; hence the latent heat of water in liquefaction is degrees. And the caloric required to change water at 212° into steam of the same temperature is degrees ; hence the latent heat of steam of *one atmosphere* is degrees.

4. How does it appear that the specific heat of bodies bears a near relation to what is called their atomic weight? Give an example.

5. Give the symbols and chemical equivalents of the following gases :

Nitrous oxyde.
Sulphurous acid.
Cyanogen.
Chlorine.
Ammonia.

6. Water is made to drive machinery by its weight simply, or by its momentum, through the agency of water-wheels ; describe these, and state under what circumstances an undershot wheel will produce its *maximum* effect.

7. What are the advantages to the farmer of a knowledge of the nature of decomposition ?

8. How is the magnifying power of a single microscope ascertained.

9. Explain the production and application of the Drummond light.

BOOK-KEEPING.

1. Explain how mercantile remittances are made between countries not having the same currency.

2. A trial balance having been made, and the amounts of the Drs. and Crs. being equal, show in what manner errors might nevertheless exist.

B

GRAMMAR.

'Tis greatly wise to talk with our past hours,
And *ask them what* report they bore to Heaven,
And how they *might have borne* more welcome news.
Their answers form *what* men experience *call*,—
If wisdom's friend, her best; if not, worst foe.

1. Parse the words in *italics*.
   a. State what the pronoun *it* stands for in the first line.
   b. To what does the pronoun *their* in the fourth line relate?
   c. Explain the meaning of the last line.
2. Write down six verbs used as both Active and Neuter, and give examples of their twofold use.
3. Write out the rule of Syntax that is violated in the following:

I told you that I would do it if I can.

4. How may the superlative be converted into the comparative, and the comparative into the superlative without changing the meaning? Illustrate by examples.
5. Why has the verb *to be* the same case after it as before it?
6. What is the difference in application between the interjections O! and Oh!?

GEOGRAPHY.

1. Specify the several positions of the following places: Truxillo, Auckland, Lewis, Aden, Tahiti, Havanna, Bencoolen and Stettin.
2. Mention and trace the situation of the isothermal bands which produce the various food-plants of the earth.
3. What are the technical names of the following:—The celestial meridian that passes through the first points of Aries and of Libra;—that arc of the meridian intercepted between the equator and the sun's place in the ecliptic;—and the portion of the equator between Aries (going eastward) and where the latter arc meets it?

4. Name the maritime counties on the east coast of Scotland, with the chief town of each.

5. Write out the heads of a lesson for a Fourth Class on the physical and industrial importance of mountains.

History.

1. Specify in detail the various subjects of inquiry with which History, as distinct from Chronology, is concerned.

2. By whom, and for what object, was idolatry first introduced into the kingdom of Israel? Where were the first two idols erected?

3. Relate the chief events that occurred in the time of Theodosius the Great.

4. Give some account of Darius Hystaspes, and of the war between the Greeks and Persians which commenced in his reign.

5. Name the Sovereigns of the House of Hanover, with the year of the accession of each to the British throne, and give some details regarding the reign of *one* of them.

Lessons on Money Matters.

1. Besides Government interference with money transactions, what other interference is to be deprecated?

2. Which of these is likely to prove the more baneful in its consequences? Give your reasons for the answer.

3. Whether in the long run is a successful or an unsuccessful strike likely to prove the more hurtful to the workmen? Explain your answer.

4. In what way can the teacher exert himself with a view to prevent the lamentable consequences of such unions or combinations of the employed against the employer?

Lessons on Reasoning.

1. How are the Major and Minor terms of a Syllogism determined, and what then do they determine?

2. What is meant by equipollent propositions? By what other name known?

3. What twofold division of propositions is made under the head of *Conversion?* Give examples of each under the three sorts of Conversion.

Lesson Books.

1. By what means are we enabled to fix a chronological order of succession of the strata which compose the crust of the earth?

2. Do bodies weigh less or more at the Equator than at the Poles? State the causes.

3. Give a short sketch of the life of James Ferguson the Astronomer.

4. Give a description of the several parts of which the flower or blossom in plants is composed.

5. How is it proved that the formation of the unstratified rocks was posterior to that of the stratified, and why is it inferred that the former were ejected in a melted state and by the agency of heat?

6. Give an outline of the principal marks of design observable in the structure of the human frame.

7. What provision was made for the administration of justice under the Jewish Polity?

ARITHMETIC.

1. Show how the following question may be solved by multiplication and division without requiring a knowledge of the Rule of Proportion :—A piece of work is completed in 12 days by 55 men working 8 hours a day; how many hours a day should 60 men work to do the same in 8 days?

2. In finding the price of 100 articles, if the price of each article be small, reduce it to farthings, and take these farthings as pence, and their double as shillings. Give the reason of this rule.

3. Define the terms *Commission, Brokerage, Insurance,* and explain why questions under these heads are solved by the principles of the Rule of proportion.

4. Find by decimals the cost of 17 yards 3 qrs. 1 nail, at £2 4*s.* 10*d.* per yard.

5. Bought 1,300 barrels of wheat at 17*s.* 10*d.* per barrel, and paid for various charges £55 15*s.* 6*d.*; sold one third at 19*s.* 6*d.*, one third at 20*s.* 6*d.*, and one third at 21*s.* 3*d.* per barrel Required the whole gain, and the gain per cent.

6. The square root of 459684 is 678 ; state whether you can determine from this the square root of all or any of the following numbers:—45·9684, 459·684, 4596·84. Give your reasons.

ALGEBRA.

1. Define *like* quantities, and specify in what points they may differ.

2. Give examples of *simple* equations of the second, third, and fourth degrees; and also of *compound* equations of these three degrees.

3. A person has $\frac{4}{5}$ of his capital invested at 4 per cent., and the remaining $\frac{1}{5}$ at 5 per cent. He receives £147 interest per annum. Required his capital.

4. A train starts from Dublin for Cork at 10 A.M., and another leaves Cork for Dublin at 12:30 P.M. The former travels at the rate of 25$\frac{1}{2}$ miles, and the latter of 20 miles an hour. Where will they meet, the distance between the two cities being 165 miles?

5. Divide $x^4-23x^2-18x+40$ by the product of $x-1$ and $x-5$.

6. Perform the operations indicated in the following expression :—

$$(2x^2+ax-a^2)\,(x^2+2ax-a^2)-(x^2+3ax-2a^2)\,(x^2-a^2).$$

Appendix I.

II. Questions proposed at the Examinations.

Male Teachers.

Geometry and Mensuration.

1. When a proposition has been proved, and that we want to establish its converse, provided such can be done, what form does the demonstration generally assume? Give examples in the first book of Euclid.

2. Prove the following:—In a triangle, ABC, having the angle ABC equal to 120°, the square of AC is equal to the sum of the squares of the other sides, together with their rectangle.

3. The side of an equilateral triangle is 12 feet, required the radius of the inscribed circle.

4. Given the sum of the perimeter and diagonals of a square, to construct it.

5. The surface of a right equilateral cylinder (height and diameter equal) is 240 square yards, required the circumference of the base.

6. Prove Prop. 11, Book II, setting forth each distinct step in the proof on a separate line.

Natural Philosophy.

1. Given the pressure per square inch 9 lbs., the area of the piston 1075·2026, the length of the stroke 6·3 feet, and the number of strokes per minute 27; required the horse-power.

2. Can fluids be readily heated by placing the fire above them? and if not, explain the cause.

3. What is meant by the specific heat of different substances?

4. Do the characters by which Geologists distinguish the relative ages of the strata, in so far as animal remains are concerned, depend upon genera or upon species?

5. Explain what is meant by the *centre of pressure* of a surface, and what great practical results are dependent upon a knowledge of this principle.

6. What is meant by lime plants and potash plants, and what are the objections to their repeated cultivation on a soil suited to their respective natures?

7. Since the pressure on the bottom of a vessel does not depend upon the quantity of fluid in the vessel, how then is the pressure ascertained? Give an example.

8. How would you calculate the horse-power of any water-wheel?

Book-keeping.

1. Draw out the entire form of the Leger Account "Butter."

2. The totals of the Dr. of the above account are 847 cwt. 2 qrs. and £2,316 10*s*., and of the Cr. 728 cwt. 3 qrs. and £1,615 16*s*.; now butter being valued at £3 4*s*. per cwt., how do you close the account? Set forth the several entries required.

C.

Grammar.

Blessings be with them—and eternal *praise*,
Who gave *us* nobler loves, and nobler *cares*—
The *Poets*, who on earth have made us *heirs*
Of truth and pure delight by heavenly lays!

1. Parse the words in the above marked in *italics*.
2. What are the Adjectives that admit of both the adverbial and terminational modes of comparison? Give examples.
3. When may the Adjective be used without the Substantive? Give examples.
4. Write out *six* nouns forming their plural by change of vowel.
5. Give a short list of proper adjectives.
6. Name the *several sorts* of nouns admitting of no plural form generally speaking, and state the exceptions.
7. What was the old ending of the third person singular of the verb in the present tense, and where is it still retained?

Geography.

1. State, from the Geography Generalized, the classification of rivers, with an example in each class.
2. Explain what is meant by the axis of the earth maintaining its parallelism, and state fully the results of this law.
3. Enumerate the independent states of Europe whose population is from three to ten millions, both inclusive.
4. Name the country in which each of the following towns is situated:—Ipswich, Oakham, Wick, Athlone, Glasgow, Youghal, Llandaff, Kirkwall, Coleraine, and Birmingham.
5. Give some account of the Polynesian Islands.
6. Compare the diurnal arc or sweep made in the heavens by the sun at the solstices and at the equinoxes, and mention such points connected therewith as you would put before your pupils.

Lessons on Money Matters.

1. *State at length* the three modes of proof by which it is shown that it is not the law or stamp which determines the value of coined money.
2. To what departments of trade in Dublin have *Trades' Unions* proved injurious?
3. Of all the useful commodities we do not ourselves supply, but require and pay for, which is the cheapest, compared with what it would cost did we provide ourselves with it? Explain your answer.

Lesson Books.

1. Write down the notes or outlines of a lesson for the

APPENDIX I. II. Questions proposed at the Examinations. *Male Teachers.*

Fourth Class on the subject of the formation of clay, and its uses.

2. Give a brief outline of the history of the Hebrew nation from the death of Joshua to the establishment of the Monarchy.

3. In what way may bad or indifferent fruit trees be rendered productive of good fruit?

4. Give a brief account of the several varieties of the dog tribe. Explain the origin of the terms *Terrier, Harrier, Spaniel, Setter,* and *Pointer.*

5. Write down a rough summary of the great divisions or classes of things respectively included under the three kingdoms of nature, and such an explanation as you would give to a class when introducing it for the first time to the subject of Natural History.

6. State what were the established means of national defence under the Hebrew commonwealth.

C.—2.

ARITHMETIC.

1. A quarter of wheat contains 456 lbs.; how would it be expressed as the decimal of a cwt.?

2. Explain how you would find by *Practice* the price of a given number of cwts. qrs. and lbs., at £2 7*s.* 7*d.* per cwt.

3. To divide a number by 5, double the number and reject the unit figure. Prove this rule, and state how the proper remainder may be found.

4. A person borrows £150, and is to pay £90 at the end of 7 months, £20 more 2 months later, and the remainder at the end of the year. At 6 per cent. per anum, what interest will he be charged?

5. Explain the following terms:—*alligation alternate, alligation medial, alligation partial, alligation total.* Give a rule applicable to all cases of alligation.

6. Find a fourth proportional to the quotient, the product, and the difference of $\frac{4}{5}$ and $\frac{7}{12}$.

7. The wages of 4 men for seven days of 10 hours, amount to £3 10*s.*, what will be the wages of 12 men for 3 days of 11 hours?

8. A sum of £385 is charged upon an electoral division consisting of four townlands whose poor law valuation is respectively £1,263, £1,478, £3,947, and £750. Find the rate per pound, the rate per cent., and the proportion to be paid by each townland.

MENSURATION.

1. Describe fully Gunter's chain.

2. The two parallel chords of a zone are 12 and 15 feet,

Male Teachers.

and the diameter of the circle 20 feet; required the area of the zone.

3. The area of a trapezoid is 196 perches, difference in the lengths of the parallel sides 8 perches, and perpendicular distance between them 12 perches; required the parallel sides.

4. How do you construct a diagonal scale on a linear inch? explain the principle, and mark on the one which you will draw ·87 inch.

5. In taking off-sets show under what circumstances it is correct to divide the sum of these off-sets by their number, using the quotient as a mean height; and state fully what course you would pursue when several off-sets are necessary.

Book-keeping.

1. How would you enter wages in a manufacturing establishment?

2. Enumerate the several cases of partnership.

No. 2.—Female Teachers.

Female Teachers.

A.[1]

Grammar, &c.

Enough, I reckon wealth;
A mean, the surest lot;
That lies too high for base contempt,
Too low for envy's shot.

1. Parse the first two lines of the above.

2. Give the derivation of the following words:—*sorrel, thirty, embroider, bewilder, canvass, exchequer,* and *damask.*

3. Name, with examples, the three cases in which intransitive verbs may be used transitively.

4. Is the following sentence, "To love virtue and wisdom are highly commendable," correct? Give your reasons.

5. Name two adverbs under each of the following heads or classes, viz.:—Affirmation, Comparison, Excess, or Pre-eminence.

6. The meaning of the prefix *a* in, respectively, Saxon, Latin, and Greek? Give examples.

Geography.

1. Describe the several positions of the Scotch Archipelagoes, and name the largest island in each group.

2. Explain why the fact of the frequent circumnavigation of the earth is not, *in itself,* a conclusive proof of its sphericity.

3. Give a short description of Denmark.

4. A message is sent by Electric Telegraph from Greenwich to Athlone (Long. 6° 35′ W.) at 10 o'clock; the wires being

connected the entire way, and the transmission instantaneous, what o'clock is it in Athlone when the message arrives?

5. Of what rivers are the following affluents :—Tennesse, Saone, Utawas, Tigris, Parana, Suck, Araguay, and Nore?

6. Name the several countries on the globe to which the sun is vertical on the 21st December.

LESSON BOOKS.

1. "*Knowledge always useful.*" Relate the story of the *Samphire* plant and the French sailors.

2. How is the animal kingdom divided, and from what are the distinctive characters of the classes taken? Give illustrations.

3. Is it the size of the leaves, or their number, that bears a proportion to the size or strength of the tree? Give examples.

4. Give a short account of the three great Jewish festivals, viz. :—the Passover, Pentecost, and the Feast of Tabernacles.

ARITHMETIC.

1. Explain the manner in which you think Compound Division can best be taught to girls.

2. If a person working $10\frac{1}{2}$ hours a day earns £3 18*s.* in 117 days, how many hours a day should she work to earn £2 12*s.* in 91 days.

3. Find by Practice the price of 650 articles, at £4 13*s.* 4*d.* per article, by three different methods.

4. What fraction of a nail are the two-thirty-fifths of a Flemish Ell?

5. Find the difference between the quotient of 3 by $\frac{3}{7}$, and the quotient of $\frac{3}{7}$ by 3.

A.[2]

GRAMMAR, &c.

1. Parse the following :—

> The wind that binds one barque within the bay,
> May waft a richer freight its wish'd for way.

2. Name two adverbs under each of the following heads or classes, viz. :—Order, Place, and Time.

3. Name a particle used both as a prefix and an affix, and give examples.

4. Explain, with examples, the several meanings of the words *charge*, *page*, and *quarter*.

5. Give the derivation of the following words:—*crotchet*, *cambric*, *dimity*, *finesse*, *florid*, and *reticule*.

6. Write down a list of the adverbs formed by a combination of prepositions with the adverbs of place.

GEOGRAPHY.

1. Make out the heads of a lesson for a Fourth Class on the Physical Geography of Mountains and of Plains.

2. Describe the portions of the earth known at the coming of our Saviour.

3. What is the prevailing religion of the following countries:—Egypt, Bavaria, Malaya, Chili, Switzerland, Denmark, United States, China, and Turkey?

4. Trace the northern limit of the Oak and Wheat, and the southern limit of the Banana and tropical grains.

5. Give the ancient names of the north-western coast of Africa, of Denmark, Persia, Hungary, Portugal, Ireland, the Black Sea, Poland, Switzerland, and Wales.

6. In latitude 21°, a degree of longitude is 56 miles; compute the hourly velocity of this portion of the earth by its diurnal motion.

Lesson Books.

1. Name the four classes into which the mineral kingdom has been divided, with an example under each division.

2. Describe the manner in which the seeds of the dandelion the thistle, and many others of this kind, are so generally and abundantly distributed over the surface of the earth.

3. Describe the process of manufacturing ordinary sewing-needles, as given in the Girls' Reading Book.

4. In the same Reading Book it is recorded, that late discoveries have shown that ants do not eat *grain*, but live almost entirely on *animal food*:—give a description of the labours, policy, and food of these insects, as stated by Lord Brougham.

Arithmetic.

1. At what period in the course of Arithmetic do you introduce the study of Practice, and of what use is this rule to the girls of elementary schools?—Show, by examples, the general nature of the questions under this rule which you consider most useful.

2. If 18 tons of hay are consumed in 26 days by 39 cows, in how many days will 15 tons be consumed by 65 cows.

3. Reduce the following fractions to equivalent fractions having a common denominator:—

$\frac{1}{3}$, $\frac{2}{5}$, $\frac{3}{7}$, $\frac{4}{9}$, $\frac{5}{11}$.

4. Reduce 3qrs. 3nls. $1\frac{3}{4}$in., to the fraction of an English ell.

5. Form a table of the aliquot parts of a cwt.

A.[3]

Grammar, &c.

Vice is a *monster* of so frightful *mien*,
As, *to be hated, needs but to be seen;*
But, *seen* too oft, familiar with her face.
We first endure, then pity, then *embrace*.

1. Parse the words in italics.

APPENDIX I.

II. Questions proposed at the Examinations.

Female Teachers.

2. Give the derivation of the following words:—*Scripture, Armada, canticle, anniversary, diaper, calico,* and *spinster.*

3. Which is the correct orthography, *cassoc* or *cassock, shoing* or *shoeing?* Give your reasons.

4. Name two adverbs under each of the following heads or classes, viz.:—Number, Quantity, Quality, and Manner.

5. Explain, with examples, the several meanings of the words *still, tack,* and *till.*

6. Write down two words of like sound, meaning, respectively, *to grow less* and *a waggon.*

GEOGRAPHY.

1. Name the Asiatic, and also the American, rivers that are each over 2,000 miles in length.

2. Describe the chief characteristics of the Mongolian and of the Ethiopian races, and point out the portions of the earth which they severally inhabit.

3. Mention the positions of the following cities, and for what each was celebrated:—Nicœa, Lystra, Tarsus, Issus, and Ephesus.

4. The altitude of the pole star, at a certain place on the earth's surface, is 66½°; name the countries under that parallel of latitude.

5 To what countries are we *chiefly* indebted for the following articles:—

Whale oil	Cayenne Pepper	Goat-skins
Sago	Molasses	Saltpetre
Cork-wood	Teak timber	Barilla?

6. A degree of longitude on the equator being greater than it is elsewhere on the earth's surface, why, on the map of the world, do we reckon the longitude of all places as if they were situated on the equator?

LESSON BOOKS.

1. Write out the substance of the lesson on the government of the tongue, as given in the Supplement to the Fourth Book of Lessons.

2. Why is it desirable, as far as possible, to manifest confidence in the *honour* and veracity of children?

3. When the swallows fly high, fine weather may be expected or continued; but when they fly low and close to the ground, rain is almost surely approaching. Explain the reasons.

4. Enumerate the several parts of which the flower of a plant consists.

ARITHMETIC.

1. Explain how you teach the Rule of Proportion to the children in your school.—Point out the chief difficulties the children experience in acquiring a knowledge of this rule,

and the means by which you endeavour to remove those difficulties.

2. Twenty dressmakers engage to have a piece of work completed in 24 days, working 10 hours a day; if five of these fail to come, how many hours a day should the others work to have the business finished in 25 days?

3. Find, by the method of complements, the price of 889 articles, at 4*s.* 7*d.* per article.

4. Reduce seventeen-twenty-fifths of a pound troy, to the denomination of pennyweights.

5. Find the product of 77 by $\frac{5}{7}$; also, the product of $5\frac{2}{3}$ by $3\frac{1}{4}$.

A.[4]

GRAMMAR, &c.

Who swerves from innocence, who makes *divorce*
Of that serene companion—a good *name*—
Recovers not his loss; but *walks* with shame,
With doubt, with fear, and haply with remorse.

1. Parse the words in italics.

2. What is *were* derived from?

3. Is the following sentence correct:—"Hertfordshire, as well as many other counties in England, are famous for cider"?—Give the reasons of your answer.

4. Name two adverbs under each of the following heads or classes, viz.:—Inference, Interrogation, Negation, and Equality.

5. Which is the correct orthography, *ransac* or *ransack*, *hoing* or *hoeing*? Give your reasons.

6. What are expletives? Give examples.

GEOGRAPHY.

1. Mention the several vegetable zones described by two travellers as existing from the foot to the summit of the Peak of Teneriffe, and of Mount Ararat.

2. Give, from the Geography Generalized, a short historical sketch of Holland.

3. Point out the precise situations of Cupar, Athlone, Exeter, Coleraine, Canterbury, Dunfermline, Mallow, Berwick, and Wolverhampton.

4. Explain, by illustrations, the terms *reflection*, *refraction*, and *twilight*.

5. State the most remarkable events connected with the following places:—Caernarvon, Moscow, Kherson, Aix-la-Chapelle, Orleans, Ajaccio, Calmar, and Frederickshall.

6. On what days in the year, and why, is the sun's meridian altitude equal to the altitude of the equator.

LESSON BOOKS.

1. Give the rule for developing good affections in a very young child.

2. State the reason why double flowers produce no seed; and explain what changes take place in the several parts of the flower.

3. Give some account of the insect called the Death-Watch, and the effects of the ticking noise on the ignorant of some countries.

4. Give a short account of the Seal and the Walrus, and name the class and order of animals to which they belong.

Arithmetic.

1. Why, and to what extent, do you think it desirable to make girls acquainted with Fractions? Specify the advantages attending the study of this part of arithmetic.

2. Of what sums will $7\frac{1}{2}d.$ be an aliquot part.

3. Find the seven-fifteenths of 90d. 17h. 33′ 24″.

4. A room is 45 feet long by 27 wide: how many yards of carpet, 3 quarters wide, will be required to cover the room? How many yards 4 quarters wide would be required?

5. Find the sum of the following fractions:—

$$\frac{8}{9},\ \frac{15}{16},\ \frac{26}{27},\ \frac{29}{30},\ \frac{1}{2}.$$

B.[1]

Grammar, &c.

> Death's but a path that must be trod,
> If man would ever pass to God:
> A port of calms, a state of ease,
> From the rough rage of swelling seas.

1. Parse the first and third lines of the above.

2. Write down a list of twelve nouns derived, in the way of contraction, from the past participle of verbs.

3. Write out three short sentences exemplifying the threefold use of the word *eye:* in the first of which it is employed as a *noun;* in the second, as an *adjective;* and in the third as a *verb.*

4. What is the concord which must exist between nouns in apposition?

5. State, with examples, the several ways in which in English the plural number of nouns is formed.

6. How would you teach a class to know at sight when *that* is a conjunction, a demonstrative pronoun, or a relative pronoun?

Geography.

1. Give a brief account, as gathered from the Fourth Lesson Book, of the south of Africa.

2. Group the several states of Europe into classes with a population of

50 Millions, or upwards,
40 „ „
30 „ „
20 „ „
10 „ „
5 „ „

3. By what rivers do the waters of Loughs Ramor, Corrib, Erne, Killarney, Neagh, Mask, and Sheelin, severally reach the sea?

4. Suppose two persons to start from Quito, and to sail or travel, the one due east, and the other due west, round the globe at an equal velocity: compare their reckoning of time when they meet, and account for the result.

5. Write out for a Sequal Class the heads of a lesson on the distribution of animals.

LESSON BOOKS.

1. State the characteristic difference between the prickles of the Bramble, and thorns of the Blackthorn.

2. Give a short outline of the vegetation of the Island of Sumatra, as described by Sir Stamford Rafles.

3. Write out the moral you would draw for the Instruction of your class from the lesson on "The Discontented Pendulum."

4. On what occasion was the Song of Deborah composed?

5. Show how beasts of prey are directed by instinct in the capture of their food.

ARITHMETIC.

1. Write down the rule for performing Compound Division when the divisor is not a composite number.

2. What quantity of linen, yard wide, will be wanted to line $12\frac{1}{2}$ yards of cloth, English ell wide?

3. Multiply £789 15*s.* $3\frac{1}{2}$*d.*, by 69, using the factors of 72. Prove the result by using the factors of 64.

4. How many drams in the five-elevenths of a hundredweight of copper?

5. Show how the items of the following bill can be calculated without entering the work on slate or paper; and write out the bill in proper form:—

Mrs. Finn bought of Mr. Daly: 120 yards of braid at $1\frac{1}{2}$*d.* per yard; 64 yards of tape at $3\frac{3}{4}$*d.* per yard; $12\frac{1}{4}$ oz. of sewing silk at 2*s.* 2*d.* per oz.; $39\frac{1}{2}$ oz. of thread at 6*d.* per oz.; 1,700 of needles at 11*d.* per 100.

B.²

GRAMMAR, &c.

1. Parse the following:—

Soldier, rest! thy warfare's o'er,
Sleep the sleep that knows not breaking.

APPENDIX I.

II. Questions proposed at the Examinations.

Female Teachers.

2. Write down a list of ten nouns derived in the way of contraction from the old third person singular of verbs.

3. What are the two easily remembered methods for finding, respectively, the nominative to a verb, and when a verb is transitive?

4. Write down as many derivatives from the following roots as you may remember:—*Fortis, Magnus, Lux, Pars, Grex.*

5. Which is the correct Orthography, *truly* or *truely, abridgment* or *abridgement, redicule* or *reticule?* Give your reasons.

6. Conjugate the verb "*to love*" in the negative emphatic form.

GEOGRAPHY.

1. Name the bays and harbours of Munster, and the chief rivers which flow into each of them.

2. State the substance of the description of the Northern Seas given in the Third Book of Lessons.

3. Describe the precise situations of the following straits:—Pentland Frith, Barrow's Straits, the Straits of Macassar, Menai Strait, and the Straits of Enikale.

4. Compare the New World with Europe as to direction of their great slopes, table-lands, rivers, number of states, and forms of government.

5. What are the chief towns of the following counties and shires:—Roxburgh, Glamorgan, Leitrim, Wilts, Wigton, Anglesea, and Kerry?

LESSON BOOKS.

1. Give some account of the Lantern-fly and the Fire-fly.—What use do some birds make of the latter?

2 What ordinance was observed by the Jews every fiftieth year? In what did it consist?

3. Give a short account of the instincts of birds as contained in the 10th lesson of the Fourth Book.

4. Give some account of the principal uses of copper and lead in the arts.

5. What is the Honey-guide?—where found, and why so called?

ARITHMETIC.

1. Write out the rule for performing Multiplication when both the multiplier and multiplicand exceed 12.

2. A person undertakes to count one hundred thousand shillings, and is to forfeit one farthing for every shilling he does not reckon; he counts 100 each minute for 11 hours, and then gives up. How much does he forfeit, and what time would be required for counting all?

3. What fraction of the English ell is the Flemish ell?

4. The carriage of 200 lbs. of goods for 60 miles comes to 4*s.* 6*d.*; what will the carriage of 20cwt. 3qrs. for 25 miles cost?

5. Show how the several items of the following bill can be readily calculated, without slate or paper; and write out the bill in proper form:—

Mrs. Waters bought of Mrs. Grogan: 48 lbs. of loaf sugar at $7\frac{1}{2}d.$ per lb.; 3qrs. 14lbs. of moist sugar at 36*s.* per cwt.; 30lbs. of rice at $4\frac{1}{2}d.$ per lb.; 17lbs. of coffee at 1*s.* 2*d.* per lb.; 25 lbs. of tea at 4*s.* 4*d.* per lb.

B.[3]

Grammar, &c.

> Communities are lost, and Empires die,
> And things of holy use unhallowed lie;
> They perish;—*but the Intellect can raise,*
> *From airy words alone, a Pile that ne'er decays.*

1. Parse the words in italics.
2. Which of the following sentences is correct?
   a. A pony ate a potato out of a basin.
   b. A poney eat a potatoe out of a bason.

Write out correctly the words misspelled.

3. Write down a list of not less than *six* derivatives formed from their roots by what is called the interchange of kindred letters.
4. Explain, with examples, the several meanings of the words *bait* and *buff*.
5. What government has noun over noun?
6. What may the relative *which* have for antecedent besides nouns or pronouns? Give an example.

Geography.

1. On the Board's Map of Europe a few spaces in the centre are enclosed by dotted lines, and each space marked by the same figure (1); explain fully, as you would for your pupils, the reason and object of this, and connect it with any list on the Map.
2. At the mouths of what rivers are Nankin, Quebec, Limerick, Havre de Grace, Stettin, Kherson, Archangel, Youghal, Dundee, and Oporto?
3. Name the countries which adjoin Hindoostan.
4. Give a short description of the islands of the Mediterranean which lie east of Malta.
5. Commencing at the north, name the border counties on the east of Connaught, with the counties in the other provinces which they respectively adjoin.

Lesson Books.

1. Write out such an explanation of the following passage as you would give to Second Class children:—

Every field is like an open book; every painted flower hath a lesson written on its leaves. Every murmuring brook hath a tongue; a voice is in every whispering wind.

2. Give some account of the mirage, and mention the parts of the world where it is most frequently seen.

3. How may an appearance similar to the mirage be produced?

4. How is it that *vegetables* are distributed over almost the whole earth, and where are they found in the greatest vigour, variety, and beauty?

5. Mention the *three obstacles* by which the progress of the Israelites was interrupted in their passage through the deserts of Arabia, and the mode by which they were delivered from each.

Arithmetic.

1. Write down the rule for Compound Multiplication when the multiplier is not a composite number.

2. How many inches in seven-eighths of a yard of linen?

3. Divide £49 18*s.* 9¾*d.* by 63, and prove by a second division the accuracy of the result.

4. If 3 yards of one kind of stuff are equal in value to 5 yards of a second, and 7 yards of this latter to 11 of a third kind, what will be the price of a yard of the first kind, when the yard of the last costs 5*s.* 10*d.*?

5. Show how the amount for each item of the following bill may be found without paper or slate, and write out the bill in proper form:—

Mrs. Reilly bought of Mrs. Murphy: 18 yards of mousseline-de-laine at 1*s.* 3*d.* per yard; 128 yards of linen at 9*d.* per yard; 42 yards of coloured calico at 4½*d.* per yard; 15 yards of black stuff at 8¼*d.* per yard.

B.[4]

Grammar, &c.

How vain is Custom, and how guilty Power?
Slaughter is lawful made by the excess;
Earth's partial laws, just Heaven must needs abhor,
Which greater crimes allow, and damn the less.

1. Parse the two last lines of the above.

2. How ascertain when the relative is nominative to the verb, and when not?

3. Explain, with examples, the several meanings of the words *comb* and *crop*.

4. Write down three words of like sound, but different in Orthography, meaning, respectively, *a valley, to yield,* and *a covering*.

5. How have interjections been classed? Write down as many divisions as you remember, with examples.

6. Give the derivation of the words *twist, fifteen, dawn, cooper, twenty,* and *forestal*.

Geography.

1. Name the several groups of islands in the Great West Indian Archipelago.

2. State the population of each of the following countries:— United States, Holland, China, Africa, and Greece.

3. Describe the various motions to which both the ocean and the atmosphere are subject.

4. Give a short description of the physical features of British America.

5. Point out the situations of the following places:— Belisle, Sarawak, Cusco, Bagdad, Gondar, Hobart Town, Aden, and Bergen.

6. With the aid of a small black globe and a piece of chalk, how would you proceed to give a first lesson on the position and uses of the imaginary lines used in Geography?

LESSON BOOKS.

1. Give the substance of the lesson on the prognostics of the weather, as explained by Sir H. Davy.

2. Give the substance of the lesson, from Professor Whewell, on the invention of the Microscope and of the Telescope.

3. Give a brief description of the Ostrich, the Cassowary, and the Condor, and name the countries to which they respectively belong.

4. Describe the circumstances attending Jacob's death, and the subsequent conduct of Joseph towards his brothers.

5. Write out the substance of the lesson upon glass, its origin, and several uses, &c.

ARITHMETIC.

1. Write down the rule for performing Long Division.

2. How many dwts. in two-ninths of a pound of silver?

3. Find the product and the quotient of 729 yds. 2 qrs. 2nls. $1\frac{1}{2}$ in., with 84 as multiplier and divisor.—Prove the results by reduction.

4. If 3 yards of cloth, 5 quarters wide, are made with 1 lb. of yarn, how many lbs. will be required to make 48 yards, 3 quarters wide?

5. Show how the several items of the following bill may be readily calculated without slate or paper, and write out the bill in proper form:—

Mrs. Dolan bought of Mrs. Kelly: $44\frac{1}{2}$ lbs. of starch at 3*d.* per lb.; 40 lbs. of candles at $5\frac{1}{2}$*d.* per lb.; 27 lbs. of composite candles at 11*d.* per lb.; 52 lbs. of soap at $3\frac{1}{4}$*d.* per lb.

C.[1]

GRAMMAR, &c.

My conscience is my crown;
Contented thoughts my rest;
My heart is happy in itself;
My bliss is in my breast.

1. Parse the first and third lines of the above.

2. Give the sense of the following words; and connected with each, write down and explain all words that may occur to you the same, respectively, in sound with them :—

Bait	Bow
Base	Beer
Beech	Berry
Break	Brute

3. Write out three short sentences exemplifying the threefold use of the word *wet:* in the first of which it is employed as a *noun;* in the second as an *adjective;* and in the third as a *verb.*

4. Write out the plural form of each of the following nouns :—

Ally	Species
Alley	Beau
Calico	Dogma
Quarto	Effluvium

Geography.

1. Commencing at the north-west of Europe, name in succession all the countries which are washed by the Northern Ocean.

2. Enumerate and define eight or more geographical terms used in reference to rivers.

3. Name, in some particular order, the countries which lie round the Desert of Saharah.

4. Which are the counties of Ireland, none of whose chief towns is of the same name as the county ?

5. Write out the names and populations of the respective countries of which the following are the chief towns :—Dresden, Athens, Lisbon, Munich, Stutgard, Berlin, Copenhagen, and Turin.

6. The longitude of the Observatory of Markree Castle, Sligo, where Graham discovered the planet Metis, in 1848, is 8° 27′ 1″ West; and that of the Capo di Monte, at Naples, where several planets have since been discovered, is 14° 15′ East : required the difference in time between them.

Lesson Books.

1. Give a description of some of the properties of mercury, and of its uses in the arts.

2. We find that some plants grow from a bulb, and are, therefore, said to have bulbous roots; state the real nature of these so-called roots.

3. Mention instances by which it is shown that animals have an instinct for self-defence.

4. Give the substance of the lesson on the Call of Abraham.

Arithmetic.

1. Write out the rule for performing Short Division.

2. Bought one thousand and ten cwt. of sugar at £2 13*s.* 4*d.* per cwt.; find the amount.

3. How many three-pences in seven thousand and eleven four-pences?

4. How many seconds from 1st of January to 31st March, 1852, both inclusive? Express the answer in words.

5. There are 16 bags to a ton of coal; how many lbs. to a bag?

6. Express in figures the following numbers, find their difference, and write it down in words:—four millions four thousand;—fourteen thousand and one.

C.[2]

GRAMMAR, &c.

1. Parse the following:—

I hate to see children neglecting their lessons.

2. Give the sense of the following words; and connected with each, write down and explain all words that may occur to you the same, respectively, in sound with them:—

Broach	Coarse
Burrow	Chuff
Cask	Cord
Check	Core

3. Write out three short sentences exemplifying the three-fold use of the word *salt:* in the first of which it is employed as a *noun;* in the second as an *adjective;* and in the third as a *verb.*

4. Write out the plural form of each of the following nouns:—

Baby	Hero
Journey	Larva
Tobacco	Madame
Canto	Medium

GEOGRAPHY.

1. Name the leading exports of Persia, Brazil, the United States of America, Egypt, and Russia.

2. What fractional portion of the entire of the dry land, and also of the gross population of the globe, is each of its five great divisions estimated to contain?

3. What kingdom in Europe is of about the same extent as Great Britain and Ireland? Name those European States that are about twice its size.

4. Name the cities that are situated at or near the mouths of the following rivers:—the Rhine, Weser, Severn, Lee, Boyne, Tweed, Shannon, Rio de la Plata, St. Lawrence, Yanktse-kiang, and Irawaddy.

5. Before detailing the *isothermal* lines, what more general division of the regions of the globe, with regard to temperature, is recommended, and name its proposed *seven* climates.

Appendix I.

II. Questions proposed at the Examinations.

Female Teachers.

6. State how you would familiarly explain to your pupils why latitude alone is not sufficient to determine the position of a place on the earth's surface.

Lesson Books.

1. What useful information would you convey to young children from the fable of the Sloth and the Squirrel?

2. How many species of plants and trees cover the surface of the earth? and under what four heads have they been classified, having regard to their several uses?

3. State the three principal divisions of the invertebrated animals, and name some of the orders under the first division.

4. What is Gypsum, and what are its various uses in the arts?

5. Describe briefly the dress worn by the Israelites.

Arithmetic.

1. Write out the rule for performing Simple Multiplication when only one of the factors exceeds 12.

2. Bought 89½ cwt. of soap at £2 15*s.* 5*d.* per cwt.: find the amount.

3. At noon on the 31st of March, 1852, how many minutes has a child lived who was born at 2 P.M. on the 1st of July, 1851? Express the answer in words.

4. The population of Ireland is about six millions and a half, and the surface about thirty thousand square miles: how many persons to the square mile?

5. There are 277¼ cubic inches to the gallon; how many to the gill?

6. Express in figures the following numbers, find their difference, and write it down in words:—nine millions nine thousand nine hundred and nine;—nine hundred and nine thousand and ten.

C.[3]

Grammar, &c.

1. Parse the following:—

I love to read good books.

2. Give the sense of the following words; and connected with each, write down and explain all words that may occur to you the same, respectively, in sound with them:—

Cousin	Dram
Creek	Fort
Due	Freeze
Fellow	Gate

3. Write out three short sentences exemplifying the threefold use of the word *flower:* in the first of which it is employed as a *noun;* in the second as an *adjective;* and in the third as a *verb.*

4. Write out the plural form of each of the following nouns :—

Dairy	Memorandum
Ruby	Seraph
Volley	Crisis
Tyro	Stimulus

GEOGRAPHY.

1. What was the origin of the Picts and Scots? when and under whom were they united into the one Scotch nation?

2. Name the largest islands in each of the following groups :—The Greater Antilles, the Philippines, the Azores, the Leeward, the Windward, the Hebrides, the Japanese, the Canary, and the Society Islands.

3. State the independent countries, with the population and chief city of each, in South America.

4. Name the Empires, Republics, and Grand Duchies of Europe.

5. State the exact situation of the cities and boroughs of Leinster and Munster.

6. At the equator South America extends from the 50th to the 80th degree of west longitude; what is its breadth in British miles?

LESSON BOOKS.

1. Give the substance of the *Fable of the Lamb;* and state what useful lesson you would draw from it for the instruction of the class.

2. Give a brief outline of the history of Moses subsequent to his first departure from Egypt.

3. In what do reptiles resemble fish,—in what do they differ from them? Name the orders into which they have been divided, and give an example under each.

4. How do you show that the beauty of plants is distinct from their usefulness, and what inference would you draw from this consideration?

5. Enumerate the particulars by which autumn is characterized in the lesson of the Third Book entitled "The Mask of Nature."

ARITHMETIC.

1. Write down the rule for performing Reduction ascending.

2. A piece of linen contains 40 English ells; how many shirts, requiring $3\frac{3}{4}$ yards each, can be made out of it?

3. Express in figures the following numbers, find their sum, and write it in words :—ninety-six ;—nine thousand six hundred ;—nine hundred thousand and sixty ;—ninety thousand six hundred and six ;—nineteen.

4. A hosier bought 15 dozen of pairs of silk stockings for 5*s.* $8\frac{1}{2}$*d.* per pair : how much had he to pay for all?

5. The circumference of the earth is about twenty-five

thousand miles: in what time would a steam-engine travel round it at the rate of 19 miles an hour?

6. State the difference between the English, the French, and the Flemish ells: how many of the first will be equal to 360 French ells, and to 965 Flemish ells?

C.[4]

GRAMMAR, &c.

1. Parse the following:—

I knew him well, and every truant knew.

2. Give the sense of the following words; and connected with each, write down and explain all words that may occur to you the same, respectively, in sound with them:—

Glare	Wrapped
Gore	Seas
Heel	Size
Isle	Sweet

3. Write out three short sentences exemplifying the three-fold use of the word *malt:* in the first of which it is used as a *noun;* in the second as an *adjective;* and in the third as a *verb.*

4. Write out the plural form of each of the following nouns:—

Grotto	Vertex
Deer	Virtuoso
Ox	Phasis
Box	Stratum

GEOGRAPHY.

1. Describe the two most important effects produced by the moon on our earth.

2. Name the four shires of England adjoining Wales, with their chief towns.

3. Describe the course of the Munster Blackwater, naming the counties it divides, those that it passes through, the chief towns that lie on it, its tributaries, and the chief physical features which distinguish it from all the Irish rivers.

4. Mention the provinces, or sub-divisions, of Turkey in Asia, with the chief towns of each.

5. Account, with examples, for the terminations *chester*, *wich*, *sex*, *moor*, and *gal*, in the names of towns, &c., in the United Kingdom.

6. The latitude of the Observatory of Paris is 48° 50′ 13″ North, and that of St Helena 15° 55′ 26″ South: required their difference of latitude.

Lesson Books.

1. Give the substance of the lesson in the Third Book on the deliverance of the Israelites.

2. Name the several uses of the root to plants, and the various kinds of roots, with examples,

3. Write down the nine orders of the Mammalia, with examples under each.

4. In the Fable of "the Dog and his Relations," how does Reynard account for the differences observable in the dog, the wolf, and the fox?

5. Write down the names of the seven common metals in the order of their weight.

Arithmetic.

1. Write the rule for performing Compound Division when the divisor does not exceed 12.

2. A silversmith made 5 dozen of table-spoons, each weighing 1 oz. 19 dwts. 21 grs.; a tea-pot weighing 3 lbs. 3 oz. 3 dwts.; 3 tankards weighing 9 lbs. 3 oz. 4 dwts.; 10 dozen of tea-spoons, each weighing 9 dwts. 12 grs.; 5 dozen of forks, each weighing 1 oz. 15 dwts. 6 grs.—Find the weight of all the articles.

3. Paid 2*s.* 2½*d.* per yard for twelve hundred and one yards of riband; how much did I pay for all?

4. Express in figures the following numbers, find their sum, and write it in words:—two thousand four hundred and seven;—forty-six;—eleven thousand and seventy;—seven hundred and eight;—eighty;—eight hundred and eighty thousand and twelve.

5. How many Irish miles in 241 degrees?

6. How often did a clock that strikes the hours strike in February, 1852?—Express the answer in words.

APPENDIX K.

Page

I.—Reports on Agricultural Schools, by Dr. Kirkpatrick, ... 357

II.—Appendix to the foregoing, ... 376

No. 1. Tabulated Statistics of Agricultural Schools, ... 376

No. 2. Reports on Model Agricultural Schools, 380

No. 3. Do. Ordinary do., . . 551

No. 4. Do. Workhouse do., . . 660

III.—Analyses of Soils of some of the Model Farms, 721

IV.—Circular: Forms of Annual Returns of Statistics of Cropping of the Agricultural Schools, 722

V.—Prospectus of the Model Agricultural Schools, 726

VI.—Directions for Obtaining Aid to Ordinary Agricultural Schools, ... 728

APPENDIX K.

I. Reports on Agricultural Schools.

I.—REPORT ON AGRICULTURAL SCHOOLS, for the Year 1852, by by Dr. KIRKPATRICK, Inspector of National Agricultural Schools.

Dr. Kirkpatrick.

Glasnevin, May, 1853.

GENTLEMEN,—I beg to submit, for the information of the Commissioners of National Education and of the public, my Fourth Annual Report (for the year 1852) on the Agricultural department of the system of National Education in Ireland.

The following table will show the number of Agricultural Schools in connexion at the date of my last Report, and at the present date :—

Schools.	In connexion 31st Dec., 1851.	Received into connexion during the year.	Struck off during the year.	Net increase.	In connexion at present date.
Model Agricultural,	28	1	–	1	29
Ordinary ,,	37	7	4	3	40
Workhouse ,,	17	7	1	6	23
Total, . .	82	15	5	10	92

The classification of the Model Agricultural Schools, on the 31st December, 1852, was as follows :—

State.	31st Dec., 1851.	31st Dec., 1852.	Increase.	Decrease.
Full operation, . . .	22	24	2	–
Partial operation, . .	3	3	–	–
Building, ...	3	2	–	1

It will be seen from the above, that there have been two additional cases brought into "full operation" (Athy and Leitrim), which, having been "building" the previous year would reduce that class by 2; but by the addition of the Ballymoney School, the decrease is only 1, as shown above. The number of schools in partial operation continues unaltered.

The following table will show how the Agricultural Schools of all classes are distributed over the country.

APPENDIX K.

I. Report on Agricultural Schools.

Dr Kirkpatrick.

SUMMARY of AGRICULTURAL SCHOOLS in the several PROVINCES and COUNTIES of IRELAND, on the 31st December, 1852.

	Counties.	Agricultural Schools.				
		Model.	Ordinary.	School Gardens.	Work-house.	Total.
1	Antrim,	2	1	–	6	9
2	Armagh,	1	1	–	–	2
3	Cavan,	1	2	–	–	3
4	Donegal,	–	2	–	–	2
5	Down,	–	–	–	2	2
6	Fermanagh,	1	–	–	–	1
7	Londonderry,	–	1	–	1	2
8	Monaghan,	2	1	–	3	6
9	Tyrone,	1	3	–	–	4
	Total in Ulster,	8	11	–	12	31
10	Clare,	2	5	–	–	7
11	Cork,	3	1	–	–	4
12	Kerry,	–	–	–	–	Nil.
13	Limerick,	2	1	–	3	6
14	Tipperary,	3	–	–	3	6
15	Waterford,	–	1	–	1	2
	Total in Munster,	10	8	–	7	25
16	Carlow,	–	1	–	–	1
17	Dublin,	1	–	2	1	4
18	Kildare,	1	2	–	–	3
19	Kilkenny,	1	2	–	1	4
20	King's,	1	–	–	–	1
21	Louth,	1	–	–	–	1
22	Longford,	–	–	–	–	Nil.
23	Meath,	–	3	–	–	3
24	Queen's,	–	–	–	–	Nil.
25	Westmeath,	–	3	–	–	3
26	Wexford,	–	–	–	1	1
27	Wicklow,	–	1	–	–	1
	Total in Leinster,	5	12	2	3	22
28	Galway,	3	1	–	1	5
29	Leitrim,	1	–	–	–	1
30	Mayo,	–	2	–	–	2
31	Roscommon,	–	3	1	–	4
32	Sligo,	–	2	–	–	2
	Total in Connaught,	4	8	1	1	14
	Grand Total,	27	39	3	23	92

On examining the foregoing it will be perceived that there are only three counties—Kerry, Longford, and Queen's—that have not an Agricultural School of some kind, in connexion with the system; and I trust that the friends of Agricultural

improvement therein will adopt means to remedy a defect which would seem to indicate an apathy to social improvement.

Agricultural Boarders.

Agricultural Boarders.—There has been a slight increase in this class of Agricultural pupils during the past year, and but for the delay in having some of the Model Agricultural Schools put into full operation the increase would have been much larger. I continue to receive the most favourable accounts of their progress and general good conduct.

Pupil-Teachers.

Pupil-Teachers in District Model Schools having Agricultural departments attached.—At Bailieborough and Dunmanway where there are Agricultural departments in connexion with the District Model Schools, it has been thought advisable as a means of still further extending the benefits of Agricultural Education, that the Pupil-Teachers should attend the lectures of the Agriculturist, and assist in the practical operations of the farm during a few of the hours that would be devoted to recreation each evening. At Bailieborough this intention has been carried out most satisfactorily with the full approbation of the Head and District Inspector, as may be seen from the report of the Agriculturist; and four pupils of this class having been appointed to the charge of National Schools during the year, they will be able (if an opportunity offers of procuring land in connexion with their Schools) to turn to profitable account for themselves and for the localities in which they may be placed, the Agricultural knowledge they acquired while in training at the District Model School.

I have long been sensible of the importance of having the teachers of our peasant youth competent to superintend their industrial as well as their literary education, and I am happy to find that my views on the matter are confirmed by the testimony of one who appears to have brought to the consideration of the subject no ordinary share of talent and practical experience.

Importance of Pupil-Teachers in District Model Schools taking part in agricultural operations.

J. C. Symons, Esq., one of Her Majesty's Inspectors of Schools in England, in his valuable work entitled "School Economy," when referring to the necessity of having the teachers of schools for the poor qualified not merely to superintend but to take an active part in the industrial operations, thus speaks :—

"It is also assumed in this estimate that the schoolmaster works hard with the boys. He must be coat off, and at it along with them. No fine gentleman schoolmaster is to be tolerated in any school for the education of working boys. If a man is above putting his hand to the spade he may be fit for a dancing-master or man-milliner, or many ladylike occupations, but assuredly he is not the stuff of which a schoolmaster, in these times, is to be made, if education means the training of a future generation of hard-working men and women. There must be no puppyism about the teachers of such a race. A capital nursery for really good teachers is that of workhouse schools; and had we but District Industrial Schools for these poor children, apart from workhouse contamination, instead of bringing them up as paupers, such schools would train for us an excellent race of teachers. Some of the workhouse schools are industrial already, and afford, in many respects, excellent examples of spade labour, and of

APPENDIX K.
I. Report on Agricultural Schools.
Dr. Kirkpatrick.

useful household work for girls. In these schools, three hours, at least, daily, are set apart for school instruction, and a large portion of the rest of the day to labour.

"In ordinary schools three and a-half or four hours will, perhaps, not be too much for school instruction; but assuredly it never should exceed that period. This will alone be a great gain over the old system of keeping children at school for six or seven hours. It is a mistake to do so; the attention cannot be profitably sustained for so long a time, on the contrary, when the child's mind is relieved, and enlivened, and his bodily vigour increased by labour, he applies with zeal and power to mental work, not sufficiently long to weary him. It has been proved that by this system he learns far more effectually than by the old fashion of exclusive school-work for a greater number of hours. The Quatt School can bear ample testimony to this fact, and to the superior attainments as well as mental activity of the boys educated and worked there, when compared with others schooled and not worked in other establishments. Again, it has been noted in the same school, between children who do work, and those who do not, with like results. The mental faculties of the former were always the most vigorous and faithful. The agency takes place not merely by means of bodily energy, which invariably extends itself to the intellect, but the child acquires new ideas, and his mind itself is directly as well as indirectly, stored and enlarged."

Industrial Classes.

Industrial Classes.—The number of pupils enrolled in these classes at the date of last Report, and at the present date is as follows:—

Dates.	Number of Pupils, and by whom paid.			Total.
	Commissioners.	Patron.	Teacher.	
31st December, 1852, . .	141	41	25	207
31st December, 1851, . .	118	41	22	181
Increase, . .	23	–	3	26

The conduct and progress of the pupils composing these classes during the past year have been most satisfactory, and the accounts given of their efficiency by the Teachers or Agriculturists in whose Schools such classes have been established are most gratifying, as may be seen from a reference to the Reports on the Bailieborough, Farrahy, Markethill, Belvoir, Rahan, Castlehackett, Ballycarry, and Kilskyre Agricultural Schools; and in most of these Schools in which they have not yet been organized the greatest anxiety is evinced for their establishment, as, for instance, in the case of the Dressog, Kidnaminsha, Cahershirkin, Ballinvally, Deigany, Cornafulla, Killenagh, Geevagh, and Upper Arigna Agricultural Schools, the conductors of which in their Reports refer to the want of such classes as the chief drawbacks on the efficiency and success of their exertions. From the beneficial result that has generally attended their establishment it might be anticipated that they would have increased to a much greater extent during the past year, but as the Commissioners now award aid towards their endowment only on

the condition of an equal amount of local contribution, and as the Managers of many of these Schools, though feeling an interest in their welfare, do not feel disposed to make pecuniary sacrifices to promote their progress; while the Teachers themselves, considering that as the *chief* object of the endowment of such classes is to insure the thorough *practical* training of the pupils and not their personal advantage (though they, of course, derive benefit), are of opinion that the required local aid should be supplied from other sources than their own limited means. Thus, though both parties may be fully convinced of the advantage of having such classes established, yet as neither considers itself specially called on to perform the necessary preliminary condition of guaranteeing local aid, the matter is allowed to lie in abeyance. In some cases, however, I regret to say, that owing to some absurd notion of pride, the pupils refuse either to work gratuitously or to enter a class where they would receive remuneration for their labour. In such cases the patron or manager of the School would do well to use his influence to dissipate the unfounded prejudice which would be such a stumbling-block in the way of the desired improvement. I do not see why a parent, no matter how independent his circumstances, should object to have his son practically trained to Agricultural pursuits by assisting in the several operations of the school farm; and as to the usual remuneration, it might be given in the shape of a book or other suitable present: besides to such parents the considerations that in allowing their children to take an active part in forwarding a work of social improvement they are not only laying the foundation of sound principles and good habits in their own children, but are setting a good example to those of an inferior condition, who now in many cases are induced to hold back when they see those above them refusing to take any part in such employment. As stated in my previous Reports, it is chiefly with the view of inducing the children of the poorer classes to take advantage of the industrial training provided for them, that pecuniary remuneration is granted, and in proof of the soundness of this principle, and as fully in accordance with my own experience in the matter, I beg to quote the views put forward on the subject by J. C. Symons, Esq., in his admirable brochure already referred to. After quoting the views of one of his colleagues (Rev. Mr. Moseley) in reference to the advantages of combined literary and industrial education, he thus proceeds:—

"It is absolutely requisite to the successful working of the system, that the children *should partake of the produce of their labour*. There are instances of opposite systems: one at Hagley, in a school established there by Lord Lyttelton, and one at Ellesmere at Worsley, at both of which the boys have the produce of the garden allotments attached to the school, and these work most successfully. In another at Warren, established by the Countess Cawdor, which is the source of much benefit to the neighbourhood, the industrial department, comprising the cultivation of a few acres of arable land, does

APPENDIX K.

I. Report on Agricultural Schools.

Dr. Kirkpatrick.

not thrive equally, the children having no part of the produce, and the parents not liking them to work. At Llanelly, a similar effort to introduce industrial employment proved abortive. I believe that the same feeling exists everywhere. The labouring classes set a just value on labour, and the constant objection made by them is, 'my child shan't work for nothing.' The only way of obviating this objection, and it is a very effectual one, is to give them something for their labour. Not only does this conciliate the parents, but it teaches the child an early lesson in the value of industry, and gives him a wholesome pride in the utility of his exertions. This is of great importance. It is of importance also in another way, touched on by the Rev. Mr. Moseley in the foregoing extract, namely, that it would prolong the attendance of the children in the school, reduced now throughout the kingdom by the parents to the shortest possible limit, from the universal desire and frequent necessity to set the children to earn something towards their livelihood as early as possible. Let schools be so moulded as to fulfil this desire instead of hindering it; let children be taught and worked together; let us abandon the purblind system of educating the head, and neglecting the hand and the heart, and our schools will soon be better filled, and our educational zeal better valued by the poor. As it is, I neither wonder at nor condemn their reluctance to surrender the time and labour—value of their children for the sort of instruction they chiefly obtain, and which they can but partially use, at the best, in after life."

It is considered by some that being members of these classes, and working on the school farms, would interfere with the literary progress of the pupils; but the unanimous testimony of all who have carefully watched the working of the system is not only contradictory of this view of the case, but goes to prove that the establishment of these classes has generally afforded an impulse to the literary progress, attention, and good conduct of the pupils. I beg particularly to refer to the opinion expressed on this subject by the Rev. Mr. Kelly, Manager of the Kilskyre Ordinary Agricultural National School, as affording strong and satisfactory evidence on this point.

General character of the conductors of Agricultural Schools.

The zeal, ability, and efficiency evinced by the conductors of the several Agricultural Schools during the past year have been in general most satisfactory. It is true that in some instances they have not yet fully established those principles of order and neatness which should form distinguishing features both in the internal and external management of such establishments; for it is not merely a beneficial change in *farm* management that they are destined to effect, but a complete revolution for the better in the social and domestic habits of our population. It should, however, be borne in mind, when noticing their shortcomings, that many of them have most arduous duties to perform, and formidable difficulties to contend with, in the improvement of their farms, which, when they have succeeded in removing, they can devote more of their attention to the proper and efficient ordering of all matters connected with the internal department. Almost all of them have furnished reports of their proceedings during the past year, with returns of the statistics and cropping of their farms; and on contrasting them with those of the previous year, it will be seen that considerable progress has been made.

I would refer particularly to the Reports on the Model Agricultural Schools of Bailieborough, Larne, Markethill, Loughashe, Rahan, Leitrim, Woodstock, Dromiskin, and Castlehackett; and to those on the Ordinary Agricultural Schools of Ballycarry, Balleighan, Ballougry, Dressog, Cornafulla, Killenagh, Drumnafern, Cahershirken, Gloungarragh, Garryhill, Piltown, Kilskyre, Ballinvally, Mullingar, and Delgany, as bearing out this assertion. In the case of the Workhouse Agricultural Schools, to which I will hereafter more particularly refer, many of the Reports and accounts are most satisfactory.

Appendix K.

I. Report on Agricultural Schools.

Dr. Kirkpatrick.

Glasnevin Establishment.—The working of this Institution (the details of which will be found in Mr. Donaghy's Report), has been conducted to my entire satisfaction during the past year, and the numerous visiters who honoured the establishment with their presence expressed themselves highly gratified with the system pursued, and the improvements effected and in progress. The observations of several, taken from the "Visiters' Book," are appended to Mr. Donaghy's Report, and it will be seen that they comprise the names of many distinguished individuals of the United Kingdom, America, and the Continent. The Superintendent, Mr. Donaghy; the Steward, Mr. M'Mahon; and the Literary Master, Mr Baldwin, have been most zealous and unremitting in the discharge of their respective duties.

Glasnevin Establishment.

New Farm Buildings.—In my last Report I expressed an opinion that these buildings would be available in August last; but several unforeseen delays have occurred to retard their completion, so that I now find they will not be finished sooner than the month of October. In the meantime steps have been taken to carry out those improvements in the *educational* department, which I then referred to as practicable under the new arrangements. Already a respectable collection of minerals, agricultural maps and tables, prints of farm animals, &c. &c., have been procured, which, with further additions that we expect to obtain before the opening of the new establishment, will form a most useful and interesting accession to the Institution.

New Farm Buildings.

As it is most important that the aid of machinery should be made available, as far as practicable, in performing the work of the farm-yard, and as it is equally important that such machinery should be of the most improved design and manufacture, I threw out a suggestion, (which was approved by the Commissioners,) that Mr. Kelly, secretary, Mr. Connolly, the contractor for the building, and myself, should be authorized to proceed to England and Scotland to examine the machinery in use in the best managed farming establishments of several of the most eminent agriculturists of these countries, by all of whom we were most courteously received, and cheerfully supplied with every item of information we required. After maturely considering the results of our experience thus

Dr. Kirkpatrick.

acquired, we decided on having the necessary machinery ordered from a party in Scotland, who have been extensively engaged in such works, and it is now in a forward state, and will be erected in the new farm buildings in a few weeks.

I expect that the portion of the new buildings set apart for the accommodation of the pupils, will be ready for their reception in a short time; and when they have been transferred to it, I anticipate that their instruction will be conducted with vastly increased satisfaction and efficiency. It is proposed that henceforth a quarterly journal shall be published at the Model Farm, edited by Mr. Baldwin, the Literary Master, who has submitted to me a prospectus of the intended publication, of which I highly approve, as it will serve not only to chronicle all the interesting and useful proceedings of the Glasnevin Model Farm, but will also contain original articles by the officers and pupils of the Glasnevin establishment, and by the most intelligent of the Agriculturists and Teachers of the several Agricultural National Schools throughout the country (to all of whom it will be supplied gratuitously), thus serving as a powerful stimulus to the constant acquirement of agricultural knowledge, and of the faculty of communicating it to others in suitable language. It will, of course, be devoted exclusively to agriculture and its kindred sciences; and as it will be confined to the conductors of National Agricultural Schools (who will still continue, as at present, to receive other agricultural periodicals), it will not interfere with the circulation of any agricultural publication conducted by private enterprise.

Proposed Quarterly Journal of Agriculture.

Another important means of instruction and source of information for the pupils at Glasnevin, is the opportunities that will constantly be afforded them of attending lectures on botany, geology, veterinary science, natural philosophy, &c.—agricultural meetings in the city—visiting agricultural and industrial museums—of which they have, to a certain extent, availed themselves during the past season, as may be seen from Mr. Donaghy's Report. The privilege of attending the monthly evening meetings of the Royal Agricultural Improvement Society of Ireland, (which has been most kindly and cheerfully accorded to them by the Council,) I regard as most important, as, on these occasions, they have not only the advantage of hearing one or two ably written papers on the leading agricultural topics of the day, read by members of the society, but also of hearing the merits of these questions ably and fully discussed by the members present. Still, with all these advantages and opportunities for acquiring information, I think we should fall far short of realizing the character of a first-rate Agricultural Training Institution, unless some further improvements are effected. To make them efficient and successful *Teachers* of Agriculture, our pupils must be afforded a much wider range of instruction than heretofore. I think it is of the highest importance that the sciences intimately connected with agriculture—such as botany, geology, miner-

Suggestions for the future Training of Agricultural Teachers.

alogy, and chemistry, should receive a due share of attention, and occupy their proper places in the curriculum of study. Heretofore there were no proper facilities for having these subjects taught and illustrated to the pupils, and I have heard many of the most intelligent of those who left the Institution deeply regret this defect in their education. I have every reason to hope, that if a good foundation were laid of a knowledge of these sciences while at Glasnevin, the pupils themselves would afterwards prosecute the study of them in their leisure moments, as a species of intellectual recreation and enjoyment. On reference to the Report on the Dunmanway Agricultural School, it will be seen that the Agriculturist purchased, out of his own private funds, a chemical apparatus which cost £6; the same was done at Loughashe and Ballougry Agricultural Schools, and would, I am sure, have been done in many other cases, had the Agriculturists previously acquired such a knowledge of the practical details of this science as to be able to conduct simple processes in it. Again, if the pupils had such a knowledge of botany as to enable them to recognise and classify the several plants indigenous to our soil, they could form valuable botanical collections, which would prove interesting and instructive to their pupils. I would, therefore, suggest that properly qualified persons be employed to deliver certain courses of lectures on these sciences to each class of pupils to be hereafter trained at Glasnevin.

Model Garden and Nursery.

Model Garden and Nursery.—There has not been so much progress as I anticipated effected in these departments during the past year, for the reasons stated in Mr. Campbell's Report; but I have every reason to be satisfied with his exertions under the circumstances, and now that he has given up the management of the garden connected with the literary training establishment at Glasnevin, and can devote all his time to the superintendence of the above departments at the Model Farm, I expect that the desired improvements will soon be effected, and that before the date of next Report these matters hitherto delayed will be in an advanced state of progress.

Glasnevin Industrial School Gardens.

Glasnevin National Industrial School Gardens.—The general management of this establishment, and the extensive improvements effected during the past year, reflect the highest credit on the ability and industry of Mr. Hawe. As the details and results of his system of cultivation will be found fully described in his Report, I have only to observe that the gardens under his management now present an appearance of skilful and successful cultivation that can hardly be excelled. The success of Mr. Hawe is a proof of what may be effected where intelligence and industry are combined with zeal for the success of a useful work. Five years ago, when he commenced to take a part with his pupils in the practical operations of the garden, under the directions of Mr. Campbell, he was totally unacquainted with the simplest principles of the business; but, by applying himself cordially and energetically to

APPENDIX K.

I. Report on Agricultural Schools.

Dr. Kirkpatrick.

the work, he has now attained to such proficiency in the art, that he is carrying it on most successfully, and has enlarged his sphere of operations so as to embrace many useful but difficult branches not originally contemplated. And this has been accomplished without in any way interfering with his efficiency as a Literary Teacher, as can be certified by the District Inspector, who, I am informed, on every occasion that he inspected the School, expressed himself perfectly satisfied with the manner in which it was being conducted. Now, though I do not anticipate that the same degree of success can be attained in many other cases, I feel quite certain that results of a highly satisfactory character may be realized wherever the work is carried on with a proper spirit of industry and perseverance; and as this system seems peculiarly applicable as a means of industrial instruction in town or village Schools, where land to the extent required for a School Farm may be difficult to procure, but where garden produce would command a ready sale, I trust that Industrial Schools, similar to that at Glasnevin, will soon be multiplied throughout the country.

Allotment system.

Allotment System.—This system has worked with greatly increased success during the past year at the Glasnevin School, as may be seen from the comparative results of the two last years, as shown in a tabulated form in Mr. Hawe's Report, to which is also appended the balance sheets of the several allotments. I feel happy in being enabled to refer to another instance, that of the Piltown Ordinary Agricultural School, in which it has been successfully carried out during the past year, as detailed in the very interesting and satisfactory Report on that School, furnished by Mr. Cunningham, the Teacher.

In the case of the Loughglynn National School, it continues to progress most satisfactorily, as stated in the Report kindly furnished by the Manager, C. Strickland, Esq., and also from the following extract from the Report of Mr. Brogan, who visited it in December last:—

"I visited several of the little gardens in and around Loughglynn, which are cultivated by the pupils under the direction of Mr. Fallon. Although the season was the most unfavourable that could be selected for judging of the progress that has been made in this species of Industrial Education, I saw quite sufficient to convince me that a most salutary and hopeful change is being effected in a department of management heretofore very little understood, and consequently sadly neglected. In many instances most gratifying and encouraging results have been realized, so that the parents now seem as anxious for the progress of the system as the pupils themselves; and I am happy to say, that from all I have heard, the system is on the *increase*, not only by the accession of new proselytes to improvement, but by the extension of the operations of those who first joined the movement, whose parents, seeing the success attending their labours on a *small scale*, have added more land to be managed on the improved garden system."

The system pursued at the Loughglynn School differs from

that followed in the two former cases, as it is not portions of the School grounds that have been allotted to the pupils for cultivation, but plots that have been assigned to them by their parents at their own homes, and which they cultivate according to the instructions, and subject to the inspection of the School Teacher, who visits each occasionally, previous to the exhibition of produce which takes place annually. The several gardens are examined by the judges, who take notes of the manner in which they are managed, and duly consider those when awarding the prizes.

Workhouse Agricultural Schools.

Workhouse Agricultural Schools.—I am very happy in being enabled to report that there has been an increase of six in this class of Agricultural Schools during the past year (as will be seen by the table in the commencement of this Report); and had I been enabled, before the close of the year, to visit all the workhouses from which applications to have the agricultural departments taken into connexion were received, a much larger increase might have been shown. During the past year, I visited all the Workhouse Agricultural Schools now in connexion (with the exception of the Banbridge and Newcastle), and I was, in general, much gratified with the way in which the agricultural departments were managed. At Ballymoney, Larne, Clones, Rathkeale, Enniscorthy, Dangan, and Tincurry (the two last auxiliaries to Galway and Clogheen Union Workhouses), the progress made is most creditable, and gratuities of from £5 to £7 10*s.* have been awarded to the Agriculturists at these workhouses for the half-year ended 30th September, 1852. In the cases of the Castleblayney, Monaghan, and Clonmel Workhouses, I found the agricultural departments in a satisfactory state; and I would have felt justified in recommending gratuities in these cases also, were it not that some were not sufficiently long in connexion to entitle them, and in others changes had taken place in the Agriculturists: so that, though the former Agriculturists would have been recommended for gratuities had they remained, their successors could not be recommended, not having been a sufficient time in charge at the period of my visit.

Recognition by the Poor Law Commissioners of Industrial Training for Pauper children.

Besides the advantages offered by the Commissioners of National Education, one of the chief causes to which the recent gratifying progress of agricultural industrial training in workhouses may be attributed, is the interest evinced in the matter by the Poor Law Commissioners, who caused copies of the last Annual Report to be sent to all their Inspectors, with directions that they should press on the attention of the several Boards of Guardians in their respective districts the views therein put forward as to the efficient training of pauper children in a knowledge of agricultural pursuits. I am happy to say that this important recognition, by the Poor Law Commissioners, of the value of industrial training for pauper children, on the system approved by, and carried out under the auspices of the Commissioners of National Education, has

already given a strong impetus to the progress of this system; as, during no period since the introduction of it into workhouses, have so many applications been made with the desire of participating in its advantages, as since the date at which the Poor Law Commissioners thus notified their wishes in respect to it by the circular which they addressed to their Inspectors, and which is appended to this Report. I have every reason to hope that, during the present year, these wishes will be responded to in every case where the means exist of having them carried into effect.

Though in former Reports I have fully explained the necessity and advantages of proper agricultural training for pauper children, and quoted the published opinions of the leading educationists and economists of the present day in support of my views, I think it may be still useful, from time to time, to advance any further arguments or opinions that may appear calculated to promote the progress and extension of such training, by disseminating sound views in reference to it. I, therefore, beg to submit the following extracts from the valuable work of Mr. Symons, from which I have already quoted:—

"Mr. Bowyer, one of Her Majesty's Inspectors of Union Schools, speaks thus of many of the schools in workhouses; and assuredly it is quite as true and applicable to the majority of schools for the independent poor:—'They are reared like the sons of persons of fortune, and their days are passed in alternate lessons and play. A boy thus brought up is entirely unfitted for an agricultural labourer; he can neither dig, hoe, nor plough; is puzzled with a harness, and afraid of a horse. Any hard or continuous labour exhausts his body and wearies his mind; he has formed a completely false conception of the life that awaited him; instead of the joyous voices of his playfellows, he hears the rough commands of an unindulging master or a scolding mistress; he is continually reproached for his awkwardness and timidity, and reminded of his pauper origin. Under these circumstances, it can hardly be wondered at if he often look back with regret to the happy indolence of his childhood.'"

Again, after referring to the success of industrial training at the Quatt Workhouse School, in the Bridgenorth Union, where the pauper boys and girls are boarded, lodged, and educated entirely apart from the workhouse (an excellent arrangement, wherever it can be conveniently carried out), he says:—

"Although the children cannot, of course, learn all the various work to be done in farms, so as to become perfect labourers, and though the girls, in their various occupations in the house, the kitchen, the dairy, the bakehouse, the washhouse, and the laundry, do not in all cases become perfect servants, yet both boys and girls learn the elements of profitable industry in all these useful spheres of service. They become apt, instead of inapt, for industrial pursuits. Instead of leaving the workhouses, as the children in them generally do, nerveless, spiritless, inert, unskilled even in the use of their hands and arms, those at Quatt go forth well qualified to profit both themselves and those who employ them. This result seems to be fully appreciated by the farmers and others, who are desirous of obtaining them as servants."

Again, in showing the necessity of having Teachers of the poor qualified to superintend and take part in industrial employment, he says:—

"A capital nursery for really good Teachers is that of workhouse schools; and had we but *district* industrial schools for these poor children, apart from workhouse contamination, instead of bringing them up as paupers, such schools would train for us an excellent race of Teachers. Some of the workhouse schools are industrial already, and afford, in many respects, excellent examples of spade labour, and of useful household work for girls. In these schools three hours, at least, daily, are set apart for school instruction, and a large portion of the rest of the day to labour."

Again, in speaking of the willingness with which boys work when properly treated and organized, deeming it a privilege to be considered worthy of being so employed in preference to their companions, he remarks:—

"In the industrial workhouse schools in my district (extending over a fifth part of the kingdom for the last four years), I have found it universally felt as a severe punishment not to allow a boy to work when he has misbehaved himself, though occasionally parents will be found to object from vanity, but this will rarely happen."

And as regards the kind of work that should be taught, he says:—

"Whether in-door or out-door, the ruling principle of the establishment should be *to make the children themselves do all work*. Their pursuits would be chiefly the following:—

"Boys.	"Girls.
1. Spade husbandry in all its branches.	1. Household work of all kinds, including cooking.
2. Attending to the cattle, pigs, &c.	2. Dairy work (for eldest girls).
3. Shoemaking, baking.	3. Washing and ironing (idem).
4. Preparation of flax for the spinners.	4. Needlework.
	5. Spinning flax."

Defects in Workhouse Agricultural Schools.

A great defect in the agricultural departments of some of the workhouses now in connexion, is the want of live stock (cows, pigs, &c.), the consequence of which is, that the cultivation has to be limited to a few green crops, and no proper rotation of farm crops can be carried out. The whole produce cannot be economized and turned to the best advantage, as much of it must inevitably go to waste where there is no live stock to consume it regularly; and, which is the greatest evil, the industrial training of the boys must be very defective in such cases, as they have no opportunity of becoming practically acquainted with more than the cultivation of a few crops, and being ignorant of many other essential details of their business when they leave the workhouse. I also find that where the children are kept in a separate establishment, or apart from the adults, their industrial training can be carried out most successfully; and I am led to believe that if a Central Agricultural Training Establishment, for destitute children of both sexes, were established in a suitable locality, with a sufficient quantity of land in connexion with it, and proper farm offices for the accommodation of an adequate quantity of the different kinds of live stock, it would be the

APPENDIX K.

I. Report on Agricultural Schools.

Dr. Kirkpatrick.

best mode of efficiently conducting the agricultural training of our pauper youth. If the idea should ever meet approval in the proper quarter, it would not be very difficult to carry it into effect. The different unions might each contribute, in proportion to the gross amount of its valuation, its quota towards the expenses of erecting and furnishing the necessary buildings, and of the stocking and first year's cultivation of the farm; and though under proper management, and with the aid that I feel certain would be granted by the Commissioners of National Education, I would expect the Institution would soon be self-supporting; yet, should there be any subsequent annual liability incurred, it should be defrayed by the different unions contributing in proportion to the number of children belonging to each maintained in the establishment during the year.

Proposed Agricultural Schools.

In my last Report I referred to the Agricultural Schools proposed to be established at Cork, Limerick, and Kilkenny. I have now the satisfaction of stating that negotiations relative to the Cork Model Farm, after seeming at one period to have been hopelessly abandoned, have now been brought to a satisfactory termination, and the land (126 statute acres), is now in the possession of the Commissioners, and undergoing a course of cultivation under the direction of a skilful Agriculturist. The plans for the necessary buildings are being prepared, and when they are completed, no time will be lost in proceeding with their erection. The plans for the farm buildings at Limerick are completed, and tenders for their erection are about being advertised for. In the case of the Kilkenny proposed Agricultural School, unexpected difficulties have arisen in procuring the necessary land; but I expect that these difficulties will soon be removed—that a suitable farm will be obtained on favourable terms—and that the intentions of the Commissioners for the benefit of that locality will ultimately be fully carried out.

There is another application for the establishment of a Model Agricultural School at Templedouglas (County Donegal), which, I trust, will be favourably entertained by the Commissioners, as there is a sum of £461 16*s.* 3*d.* available as a local contribution towards its erection, and a suitable farm has been offered at a fair rent by the proprietor. The negotiations respecting the establishment of a Model Agricultural School at Ballymoney, on the property of the Earl of Antrim, have eventuated in the usual aid being afforded by the Board. The land to be connected with it is now in the hands of the Commissioners, and is in course of cultivation, under the direction of their Agriculturist. The erection of the farm buildings is about being commenced.

Extension of land attached to Model Farms.

Opportunities having offered, during the past year, for extending the area of some of the School Farms, as at Glasnevin, Athy, and Farrahy, and having been instructed to report on the expediency of taking the additional land, I was enabled to recommend the extension to be effected in each case. I

consider it advisable that in all those cases where a sufficient quantity of land could not be procured at the commencement, and that an opportunity subsequently presents itself for obtaining additional land adjoining the original farms, it should be availed of (provided the terms would not be unreasonable), so that the maximum quantity of land for which the farm buildings could accommodate stock should be attached to each of these establishments. Experiments on the growth of different crops, and of the comparative effects of different manures, have been instituted, during the past year, at Glasnevin, Larne, and Markethill; and the results will be found fully detailed in the reports on these establishments. The importance of these experiments, when carefully conducted, cannot be over-estimated; as, besides arriving in the most direct and satisfactory way at a knowledge of some practical truths in agriculture, they may be useful in promoting the establishment of correct principles in some of the sciences connected with it. The following extract from a note addressed to me by Professor Sullivan, of the Museum of Irish Industry, Stephen's-green, shows the value he attaches to the services that may thus be performed by the National Agricultural Schools:—

"I have been particularly struck with the advantages which the Agricultural Schools may render to scientific agriculture, on receiving the roots from Markethill. Distributed over so many different parts of the country, and upon almost every variety of soil, they present the most favourable combination of circumstances for examining the influence of soil, of height, &c., upon the composition of a plant, and afford the best means of testing the action of a particular manure, or of a system of cultivation. The great mistake hitherto has been that experiments upon scientific agriculture have been confined to one locality, or at most to a few, and hence the deductions made have not been as successful as they would have been if the examination extended over a large region. I do not know how far your arrangements in these Schools admit of being thus employed; but ever since I have visited the Model Farm at Glasnevin, I have come to the conclusion that the benefits which the whole system of agricultural education, now being established by the Board of National Education, will confer upon scientific agriculture, will be quite as great as those which it will confer in producing a social regeneration of the peasantry."

I trust, therefore, that henceforth the institution of such experiments will not be limited to a few instances, as at present; but that the conductors of *all* our Agricultural Schools will set themselves earnestly to work in the matter; and, by carefully conducting a series of useful experiments each year, afford ample details from which the scientific inquirer may deduce those important principles by which science is advanced and established, and social progress promoted.

Inspection of Agricultural Schools.

The inspection of the several Agricultural Schools has been carried out, during the past year, to as great an extent as my other engagements would permit. Many of them, especially those under the immediate management of the Commissioners, were inspected several times, and all now in connexion, with the exception of two Ordinary, and three Workhouse Agricultural Schools, were inspected at least once. At the close of

APPENDIX K.

I. Report on Agricultural Schools.

Dr. Kirkpatrick.

the year there remained a few "Ordinary" and Workhouse applicant Agricultural Schools to be reported on, which my other engagements prevented me from visiting; but since the Commissioners have been pleased to afford me assistance, by the appointment of Mr. Brogan as an Agricultural Inspector, the duty of the inspection department, (on the frequent and efficient performance of which the successful working of the agricultural department so much depends,) will henceforth be performed with due vigour. Mr. Brogan, having previously accompanied me in my inspection of most of the Agricultural Schools, entered on the active duties of his office in September last, and before the close of the year he had inspected and reported on nearly all the remaining cases; and I may here remark, that Mr. Brogan's superior abilities and zeal in the cause of agricultural education, render him well suited for the duties of the situation he now fills.

Conclusion.

The progress of the agricultural department, during the past year, has been, on the whole, most satisfactory and encouraging. On a comparison of the statistical details of the past year with that of the preceding, it will be found that they exhibit a more favourable result in every particular. Thus, of pupils receiving agricultural instruction, there has been an increase of 629 "day pupils," 5 "agricultural boarders," and 26 in "industrial classes." There has been an increase in each of the kinds of live stock kept—an additional quantity of land, to the extent of 194 acres, 3 roods, and 32 perches, brought under proper cultivation—an increase of nearly one thousand pounds expended in cultivation, in which there is an increase of £328 10*s.* 7½*d.* (or nearly 50 per cent. over that of the previous year), for *labour of pupils.* The profits resulting from the cultivation show an increase of £1,061 4*s.* 6½*d.* in the aggregate, and an increase of 12*s.* 6*d.*, or 40 per cent. over the net acreable profit of the previous year.

Trusting that the system of agricultural education may thus go on, each succeeding year, extending its organization, enlarging its beneficial results, developing new phases of improvement, and advancing the prosperity of the country,

I am, Gentlemen, your obedient servant,

THOMAS KIRKPATRICK,
Agricultural Inspector.

To the Secretaries,
Education Office, Marlborough-street.

A.—AGRICULTURAL TRAINING OF WORKHOUSE BOYS:—
Circular to Inspectors thereon.

Poor Law Commission Office, Dublin,
20th January, 1853.

SIR,

I am directed by the Commissioners for administering the Laws for Relief of the Poor in Ireland, to forward for your information a copy of the last Report of the Commis-

sioners of National Education, by which you will observe that the Commissioners of Education are desirous that the number of Workhouse Agricultural Schools in connexion with that Board, now amounting to 16, should be increased.

There are many Unions not included in that number, in which the boys are at present trained in agricultural work, but without assistance from the Commissioners of National Education; and in any case in which the Guardians may desire to receive that assistance, it will be necessary for them to enter on their minutes a resolution to that effect; stating further, that a class of boys is, or will be, taught by the Schoolmaster (or Agriculturist) the theory and practice of agriculture. On the receipt of this resolution there is reason to believe that the Commissioners of Education will provide a free stock of Agricultural Class Books.

The Commissioners of Education will further direct their Agricultural Inspector to visit the school, and should his report be favourable, both as to the state of that portion of the farm cultivated by the boys, as well as to the attention given by the Schoolmaster or Agriculturist to teaching the elementary knowledge of agriculture, a gratuity, which may be an annual one, will be given to the Teacher by the Education Board, not exceeding £15. Agricultural Schools have, in many unions, been in successful operation, which are not in connexion with the National Board; but the grant of books, and a premium to the Teacher, will, the Commissioners trust, be found an additional encouragement to the full working of the system, whilst, no doubt, the practical information of the Agricultural Inspector, as to the best method of farming, will also be valuable.

The Commissioners believe that there are few Workhouses which have not a sufficient quantity of land attached to them to enable the Guardians to set apart a portion for the purpose of training an agricultural class. The crops to be raised would most probably be those requiring the greatest amount of care and spade labour; and should the cultivation of the land by the boys go no further than to raise the various kinds of vegetables required for the use of the inmates, a better system of cultivation of the more useful green crops might probably be introduced into the district.

The agricultural instruction (in Unions where there is no skilled Agriculturist), both in the school-rooms and field, will devolve on the Schoolmaster, who should devote a portion of his time to these objects, without sacrificing the three hours in school prescribed by article 23 of the Workhouse regulations. A difficulty may be raised in carrying out this system, from alleged want of leisure, on the part of the Schoolmaster; but in ordinary instances it has been found sufficient to devote one hour before breakfast, and three before dinner, to literary instruction, and to devote from two to five to the farm.

It has been observed, that where the school-hours have been limited, and the children employed in the open air, they

APPENDIX K.

I. Report on Agricultural Schools.

Dr. Kirkpatrick.

have assumed a stronger and healthier appearance, whilst they have not fallen back in other branches of knowledge. The Commissioners believe it to be of the utmost importance that children who have to live by their labour should be trained to labour early; a boy who has not handled a spade at the age of fourteen will rarely turn out an active labourer, and that it is, therefore, most desirable that the boys generally should be accustomed to work at the earliest practicable age.

It has been observed, that the success of all benevolent institutions for the education of the children of the poor, at home and on the continent, has, in no small degree, turned on the amount of industrial teaching provided for the children, and that those institutions have been less useful where the chief efforts have been directed to literary attainments. The Guardians should, of course, provide the necessary agricultural implements, suited to the age and strength of the children.

The Commissioners have, therefore, to request that you will take an opportunity of conveying these views to the Boards of Guardians of any union of your district in which proper arrangements for agricultural instruction of the boys are not in operation, or in which you may consider the existing arrangements may be improved by adopting the above suggestions.

It has been represented to the Commissioners, that the minimum amount of nutriment required to be given to class 4, by the Dietary Regulations (article 13 in Workhouse rules), is scarcely sufficient for boys between the ages of 12 and 15, when engaged several hours of the day in active and laborious employment; and the Commissioners have been requested, in some cases, to constitute these boys into a separate class, intermediate to classes 3 and 4, with an additional allowance of food.

On full consideration hereof, the Commissioners have determined not to alter the existing regulations, relating to the dietaries, but they desire to point out that they are prepared, under paragraph No. 10 of those regulations, to entertain any proposal which may be made to them by the Board of Guardians, under the advice of the Medical Officer, to give a somewhat larger allowance of food to boys between the ages of 12 and 15, engaged in agricultural or other industrial training, than to the other children included in class 4.

By order of the Commissioners,

W. STANLEY, Secretary.

To each Poor Law Inspector.

B.—"SEVEN COURSE ROTATION," suitable for a Workhouse Farm where some Grain would be cultivated.

1st Year—Mangels and Swede turnips.
2nd „ —Wheat, oats or barley with grass seeds.*
3rd „ —Grass for soiling and hay—to be liquid-manured after each cutting.
4th „ —Potatoes in ridges, with cabbages in the brows, to be succeeded by "stolen" crops of Savoy and borecole.
5th „ —Flax, succeeded by "stolen" crops of rape and winter vetches.
6th „ —Cabbages—(flat Dutch, drum-head, and cow cabbage).
7th Year—Parsnips, carrots, beets, onions, leeks, lettuce, &c.

The above shows the order of succession of the different crops on the *same division* during the course of the rotation.

C.—"EIGHT COURSE ROTATION," suitable for a Workhouse Farm on which it might not be advisable to cultivate any Grain Crops.

1st Year—Mangels and Swede turnips.
2nd „ —Cabbages (nonpareil, early York, and borecole).
3rd „ —Flax, laid down with Italian rye-grass.
4th „ —Italian rye-grass for soiling and hay—to be liquid-manured after each cutting.
5th „ —Potatoes in ridges, with cabbages planted in the brows—to be succeeded by rape and vetches.
6th „ —Mangels and Swede turnips (the former after rape, and the latter sown or transplanted after vetches).
7th „ —Carrots and parsnips in beds, interlined with beans and peas, if thought desirable.
8th „ —Onions, leeks, celery (for soup or broth), and lettuce for pigs or bullocks.

The above shows the order of succession of the different crops *on the same division*, during the course of the rotation. It will be perceived that Mangels and Turnips occur *twice* in the rotation, but by *alternating* them each year, that is, by taking care to have Turnips where Mangels grew the previous season, and *vice versa*, either will occupy the same ground only *once* in the course of the rotation.

N.B.—It would be desirable that a bullock should be kept for the purpose of carting.

* If it were thought advisable to have a *second* division under grain *without grass seeds*, it might come in after the grass, and extend the rotation to an "Eight-Course Shift." Another "stolen" crop of cabbages might in that case be taken after the grain; but the main crop of potatoes should, in this case, be planted in drills, the cabbages (early varieties) being planted in the alleys, and the latter should be fit for use before the growth of the potatoes would be liable to be impeded by them.

APPENDIX. 1.—STATISTICS OF AGRICULTURAL SCHOOLS—Showing the Number or the Quantity of Live Stock kept, the Extent and Rent per Statute Acre of the year, for each of the Agricultural Schools in operation, as returned by their

School.	County.	Pupils. Receiving Agricultural Instruction. Boarders. Free.	Boarders. Paying	Day Pupils.	Industrial Class. Paid by the Board.	Paid locally. Patron.	Paid locally. Teacher.	Total.	Live Stock. Draft Animals.	Black Cattle.	Sheep.	Pigs.	Poultry.	Particulars of Model Farm. Extent.	Rent, or Value per Acre (statute).	Rotations followed.
														A. R. P	£ s. d.	
MODEL AGRICULTURAL SCHOOLS.																
Under the immediate and exclusive management of the Commissioners.																
Glasnevin Natl. Model,	Dublin,	46	–	–	–	–	–	–	6	39	–	35	45	161 3 22	3 19 5	4, 5, 6, C.
Ditto Model Garden,	Do.,	–	–	–	–	–	–	–	–	–	–	–	–	3 0 0	5 0 0	4, 6, 7, C.
Ditto Industrial Gardens,	Do.,	–	–	26	15	–	–	15	–	–	–	–	–	1 0 20	4 0 0	3, 4, 6, C.
Bailieboro' Dis. Model,	Cavan,	1	3	28	6	–	–	6	1	7	–	2	–	17 0 0	1 14 0	4, 5, C.
Dunmanway D. Model,	Cork,	1	3	34	12	–	–	12	1	3	–	10	18	12 1 4	2 5 0	3,4,C.Shifts
Athy*Dist.Mod.	Kildare,	1	2	*10	10	–	–	10	1	5	–	6	9	19 2 31	1 4 8	7 Course
Glandore,	Cork,	–	–	25	–	6	–	6	1	8	–	10	17	24 3 8	1 5 0	3, 4, C.
Farrahy,	Do.,	1	1	24	6	–	–	6	1	6	–	2	8	18 1 0	0 10 0	Do.
Tervoe,	Limerick,	–	–	12	–	–	–	–	1	3	–	7	20	29 0 0	1 0 0	4, 2, C.
Kyle Park,	Tipperary,	1	1	10	6	–	–	6	1	4	–	9	–	16 0 0	1 0 0	5 Course
Derrycastle,	Do.,	1	2	12	–	–	–	–	–	–	–	–	–	18 1 22	0 14 0	—
Gormanstown,	Do.,	–	–	–	–	–	–	–	–	5	–	19	32	21 0 0	1 0 0	4 Course
Leitrim,	Leitrim,	–	–	–	–	–	–	–	1	2	–	–	3	15 0 0	0 16 0	3, 4, C.
Under local management.																
Larne,	Antrim,	–	3	33	6	–	2	8	1	4	–	4	12	7 1 3	3 0 0	Do.
Kilwaughter,	Do.,	–	2	24	4	–	4	8	3	23	2	7	15	47 1 11	1 2 0	4 Course
Markethill,	Armagh,	4	–	20	6	3	3	12	1	6	–	2	10	18 1 7	1 13 6	3, 6, C.
Carrick,	Fermanagh,	–	–	23	–	–	–	–	1	7	–	3	35	21 0 0	1 0 0	4 Course
Bath,	Monaghan,	–	–	14	–	–	–	–	4	12	–	15	–	65 1 26	0 13 $1\frac{1}{2}$	4, 5, C.
Drumhilla,	Do.,	2	–	12	6	–	4	10	2	17	–	10	5	48 0 0	1 1 0	3, 4, C.
Longhashe,	Tyrone,	–	18	12	–	–	–	–	2	27	5	14	50	40 0 10	0 13 10	5 Course
Sallybank,	Clare,	–	–	16	4	–	2	6	1	4	–	12	20	8 0 0	0 12 6	6 Course
Belvoir,	Do.,	–	–	18	6	–	2	8	–	2	–	2	12	12 0 0	1 0 0	4, 5, 6, C.
Mt. Trenchard,	Limerick,	–	–	53	–	–	–	–	2	9	–	15	25	30 0 0	0 14 0	4, 5, C.
Woodstock,	Kilkenny,	1	1	12	4	–	–	4	1	3	–	3	18	8 2 35	1 0 0	7 Course
Rahan,	King's Co.,	–	–	31	6	–	–	6	1	3	–	6	22	12 3 3	0 18 6	4 Course
Dromisken,	Louth,	–	–	32	6	–	–	6	1	1	–	8	–	10 3 12	1 4 $8\frac{1}{2}$	Do.
Loughrea,	Galway,	–	–	16	–	–	–	–	–	4	–	2	24	8 2 15	0 18 6	5 Course
Ballinakill,	Do.,	–	1	38	–	6	–	6	–	6	–	2	40	9 0 23	0 15 0	Do.
Castle Hacket,	Do.,	–	1	14	6	–	–	6	–	2	11	1	28	12 2 0	0 10 0	Do.
ORDINARY AGRICULTURAL SCHOOLS.																
Ballycarry,	Antrim,	–	–	20	4	4	–	8	1	4	–	1	14	7 1 20	1 4 $4\frac{3}{4}$	4 Course
Drumkearl,	Cavan,	–	–	12	–	–	–	–	1	6	–	–	10	9 2 35	0 9 3	Do.
Lough Ramor,	Do.,	–	–	30	–	–	–	–	–	3	–	5	16	8 0 24	0 8 11	3, 4, 5, C.
Balleighan,	Donegal.	–	–	21	4	2	2	8	1	5	–	–	18	12 0 0	1 0 0	5 Course
Ballougry,	Londonderry,	–	–	8	–	–	–	–	1	6	–	1	12	6 0 20	0 17 6	4 Course
Kidnaminsha,	Monaghan,	–	–	18	–	–	–	–	–	–	–	–	–	14 0 0	– –	—
Dressog,	Tyrone,	–	–	10	–	–	–	–	–	3	–	–	20	6 0 0	1 13 4	4 Course
Drumnafern,	Do.,	–	–	14	–	–	–	–	–	4	–	1	13	5 1 16	0 11 0	5 Course
Five-mile-town,	Do.,	2	–	33	–	–	–	–	–	1	–	–	5	4 0 13	1 7 9	3 Course
Parteen,	Clare,	–	–	20	2	2	–	4	–	1	–	2	11	2 1 0	3 11 0	4 Course
Knocknaguehy,	Do.,	–	–	–	–	–	–	–	–	–	–	–	–	–	–	—
Feakle,	Do.,	–	–	12	–	–	–	–	–	5	–	1	10	6 0 0	0 18 9	Do.
Cahersherkin,	Do.,	–	–	24	–	–	–	–	1	4	–	2	30	9 2 0	0 7 0	4, 5, C.
Kildinan,	Cork,	–	–	12	–	–	–	–	–	1	4	–	15	7 0 0	0 10 0	4 Course
Gloungarriah,	Waterford,	–	–	30	–	6	–	6	1	3	–	2	17	10 0 0	0 10 0	Not yet established.
Garryhill,	Carlow,	–	–	12	–	4	–	4	–	3	–	2	10	4 2 37	0 14 9	4 Course

* No Returns.

† Estimated amount free.

Pupils receiving Agricultural Instruction, the Number in the "Industrial Class," Model Farm, the Expenses of and Profit or Loss on the Cultivation for the past respective Conductors, and certified by the Managers, on the 31st December, 1852.

Expenses of Cultivation.					Results of Cultivation.			
					Total Profit or Loss.		Acreable Profit or Loss.	
Amount paid for Labour.	Value of the free Labour of the Pupils, &c.	Cost of Seeds, Manures, Implements, &c.	Rent, Rates, and Taxes.	Total.	Profit.	Loss.	Profit.	Loss.
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s d.
252 19 8	–	456 9 6	599 13 0	1,309 1 10	437 2 9	–	2 14 0	–
1 18 0	–	20 12 9	16 8 9	38 19 6	20 1 11	–	6 14 0	–
36 16 11	15 0 0	45 17 3	4 9 6	102 3 8	63 4 7	–	56 4 0	–
53 5 9	5 0 0	25 2 4	31 4 6	114 12 7	–	28 17 8	–	1 14 0
23 6 4	10 0 0	10 11 4	34 2 11	78 0 7	–	38 19 3½	–	3 3 6
83 5 5	1 10 0	40 15 1	26 12 11	152 3 5	7 0 3	–	0 7 1½	–
46 14 2	–	29 12 7	33 2 4½	109 9 1½	8 17 1½	–	0 7 2	–
38 14 2	6 0 0	41 17 11	10 16 5	93 13 10	–	18 13 7	–	1 0 6
46 3 3	–	17 12 3	29 8 11	93 4 5	2 9 7	–	0 1 7	–
29 7 7	5 0 0	29 14 7	17 10 0	81 12 2	–	24 2 8	–	1 10 2
–	–	–	–	–	–	–	–	–
47 10 8	–	39 14 1	20 0 0	107 4 9	45 5 8	–	2 5 3	–
48 5 8½	–	11 9 0½	7 0 10	111 13 1	18 13 3	–	1 4 10½	–
22 6 11	10 0 0	6 19 4	20 18 0	60 4 3	29 18 6	–	4 5 6	–
61 18 0½	8 0 0	66 8 5½	52 3 4	189 11 10½	65 17 6½	–	1 9 11½	–
20 17 5½	6 18 0	19 16 1½	28 3 6½	75 15 1½	40 5 9½	–	2 4 1	–
18 1 6	4 0 0	0 11 1	22 4 0	44 16 7	0 2 5	–	0 0 1½	–
31 13 3½	–	23 6 8	46 11 1½	171 15 1	55 1 11½	–	0 17 0	–
40 9 6	7 6 0	22 1 8	51 17 11	121 15 1	90 11 3	–	1 16 2	–
30 5 0½	51 12 1½	15 0 6	33 12 4	130 10 0	80 7 1	–	2 0 2½	–
9 8 11	5 0 0	18 0 0	5 6 0	37 14 11	6 3 9	–	0 15 5½	–
4 18 0	9 18 6	4 8 5½	12 0 0	31 4 11½	8 5 7½	–	0 13 9½	–
52 18 11	–	13 4 8	19 0 2	85 3 9	15 9 5½	–	0 10 3½	–
14 8 1	1 4 0	10 16 5½	8 14 4½	35 2 11	15 3 10	–	1 14 9	–
12 5 3	5 0 0	12 11 11	12 4 4	42 0 8	45 10 2½	–	3 0 11½	–
23 4 10	2 17 0	13 14 6	14 9 5	54 5 9	17 9 3	–	1 12 0	–
7 12 10	6 15 0	5 19 4	10 19 5½	31 6 7½	25 18 10½	–	3 1 7	–
12 12 2	2 10 0	1 17 4	6 17 6	23 17 0	33 7 4	–	3 13 0	–
4 7 0	–	7 0 0	6 5 0†	17 12 0	5 4 0	–	0 8 4	–
12 13 6½	5 4 0	9 1 8	9 12 9	36 11 11½	24 6 0½	–	3 5 10	–
5 12 1	1 0 0	3 0 0	6 6 4½	15 18 5½	4 18 6	–	0 10 1½	–
20 0 7	–	8 15 7½	7 1 7½	35 17 10	5 3 7½	–	0 12 9	–
13 15 4	7 16 0	15 0 3	14 3 4½	50 14 11½	25 1 10	–	2 1 10	–
7 2 0½	0 6 0	13 6 11	5 17 8†	26 12 7½	15 12 6	–	2 11 0	–
–	–	–	–	–	–	–	–	–
14 16 4	–	18 19 6	10 0 0	43 18 10	5 13 0	–	0 18 10	–
8 19 11½	–	1 16 8	3 14 1	14 10 8½	10 9 3½	–	1 19 1	–
3 14 6½	5 0 0	4 2 7	5 13 7	18 10 8½	14 6 10½	–	3 10 0	–
2 4 0½	4 0 0	5 6 10½	8 0 0§	19 10 11	–	6 5 4½	–	2 15 8½
–	–	–	–	–	–	–	–	–
14 2 6	1 2 0	5 7 3	7 14 0	28 5 9	10 2 0	–	1 13 8	–
13 8 8	1 10 0	15 3 9½	4 2 0	34 14 5½	11 18 3½	–	1 5 1	–
5 3 6	1 0 0	2 3 0	3 10 0	11 16 6	10 6 0	–	1 9 5	–
11 0 0	3 0 0	8 11 9	6 7 9	28 14 6	8 13 3	–	0 17 3	–
5 9 10	3 18 0	3 16 0	3 13 6	16 17 4	22 1 8	–	4 12 8	–

‡ Value rent free.

§ Free.

APPENDIX 1.—STATISTICS OF

SCHOOL.	COUNTY.	PUPILS. Receiving Agricultural Instruction. Boarders. Free.	Boarders. Paying	Day Pupils.	Industrial Class. Paid by the Board.	Paid locally. Patron.	Teacher.	Total.	Live Stock. Draft Animals.	Black Cattle	Sheep.	Pigs.	Poultry.	Particulars of Model Farm. Extent.	Rent, or Value per Acre (statute).	Rotations followed.
														A. R. P.	£ s. d.	
ORDINARY AGRICULTURAL SCHOOLS—*continued.*																
Two-mile-house,	Kildare, .	–	–	29	–	–	–	–	1	6	–	–	8	4 3 17	0 17 6	4 Course
Kilberry, . .	Do., . .	–	–	12	4	4	–	8	–	–	–	–	–	3 0 0	0 12 4	Do.
Ooning, . .	Kilkennny, .	–	–	26	–	–	–	–	1	–	–	2	–	4 2 7	1 2 6	Do.
Piltown, . .	Do., . .	–	–	30	4	4	–	8	1	2	–	2	24	6 2 23	1 10 10	Do.
Ratoath, . .	Meath, . .	–	–	12	–	–	–	–	–	3	–	1	20	7 2 30	1 8 6	Do.
Kilskyre, . .	Do., . .	–	–	36	4	–	4	–	1	7	–	2	30	2 3 13	0 15 10‡	Do.
Ballinvally, .	Westmeath, .	–	–	18	–	–	–	–	–	1	–	1	–	2 2 16	0 16 0	3 Course
Clonmellon, .	Do., . .	–	–	24	–	–	1	1	–	2	–	1	–	6 1 36	2 0 0*	4 Course
Mullingar, .	Do., . .	–	–	30	4	–	4	8	1	5	–	5	–	11 0 35	1 0 0	Do.
Delgany, . .	Wicklow, .	–	–	48	–	–	–	–	–	4	–	2	18	4 2 26	1 5 0	6 Course
Esker,† . .	Galway, .	–	–	25	–	–	–	–	–	–	–	–	–	–	–	3 Course
Cappaduff, .	Mayo, . .	–	–	17	6	–	–	6	–	7	–	12	–	3 0 38	0 3 1	—
Balla, . .	Do., . .	–	–	10	–	–	–	–	1	1	–	2	–	10 2 0	0 15 3	3 Course
Cornafulla, .	Roscommon,	–	–	12	–	–	–	–	–	3	–	2	18	11 2 32	0 9 3	Do.
Geevagh, . .	Sligo, . .	–	–	22	–	–	–	–	–	1	–	1	12	3 0 0	1 10 6*	4 Course
Upper Arigna, .	Do., . .	–	–	12	–	–	–	–	–	1	–	–	15	3 0 0	0 12 6	4 Course
Taniokey, .	Armagh, .	–	–	8	–	–	1	1	–	2	–	1	13	4 2 0	1 12 10	5 Course
Carradoan, .	Donegal. .	–	–	15	–	–	–	–	1	7	2	–	16	8 0 0	0 14 5	4 Course
Ballynalacken, .	Clare, . .	–	–	20	–	–	–	–	1	6	–	2	12	7 0 0	0 5 9	Do.
Killacolla, . .	Limerick, .	–	–	20	–	–	–	–	1	4	–	1	6	14 0 0	0 11 6	5 Course
Woodpole, .	Meath, . .	–	–	10	–	–	–	–	–	–	–	–	–	16 0 0	Not yet determined	3 Course
Killenagh, .	Roscommon,	2	–	25	–	–	–	–	–	1	–	–	9	9 1 10	0 18 6	5 Course
Glanduff, . .	Do., . .	–	–	16	–	–	–	–	3	5	–	4	23	20 3 10	0 7 10	None yet established.
WORKHOUSE AGRICULTURAL SCHOOLS.																3, 4, C.
Antrim, . .	Antrim, . .	–	–	25	–	–	–	–	1	4	–	5	–	17 0 0	2 12 0	
Belfast, . .	Do., . .	–	–	52	–	–	–	–	–	–	–	–	–	1 2 12	4 0 0‡	4 Course
Ballymena, .	Do., . .	–	–	23	–	–	–	–	–	–	–	–	–	7 2 27	2 10 0	Gar. cul.
Ballycastle, .	Do., . .	–	–	30	–	–	–	–	–	6	–	9	–	8 0 11	1 0 0	None estab.
Ballymoney, .	Do., . .	–	–	–	–	–	–	–	1	4	–	31	–	13 0 13	2 8 0	4 Course
Larne, . .	Do., . .	–	–	24	–	–	–	–	–	–	–	–	–	2 3 30	2 11 0	None estab.
Coleraine, .	Londonderry,	–	–	30	–	–	–	–	–	–	–	12	6	12 0 0	2 16 3	5 Course
Banbridge, .	Down, . .	–	–	–	–	–	–	–	–	–	–	–	–	8 2 24	2 5 0	None estab.
Newtownards,†	Do., . .	–	–	–	–	–	–	–	–	–	–	–	–	1 2 0	–	Do.
Clones, . .	Monaghan, .	–	–	24	–	–	–	–	1	–	–	–	–	10 2 0	3 10 0	—
Castleblayney, .	Do., . .	–	–	48	–	–	–	–	–	–	–	–	–	3 0 4	1 6 6	—
Monaghan, .	Do., . .	–	–	30	–	–	–	–	–	–	–	–	–	1 0 0	2 0 0	3, 4, Courses intended.
Rathkeale, .	Limerick, .	–	–	30	–	–	–	–	–	–	–	–	–	10 3 0	1 0 0	4 Course
Kilmallock, .	Do., . .	–	–	60	–	–	–	–	–	–	–	–	–	31 2 17	1 14 0	3 Course
Newcastle, .	Do., . .	–	–	48	–	–	–	–	–	–	–	–	–	19 0 0	1 0 0	4, 5, C.
Clonmel, . .	Tipperary, .	–	–	200	–	–	–	–	–	–	–	–	–	13 1 7	3 8 0	4 Course
Carrick-on-Suir,	Do., . .	–	–	8	–	–	–	–	2	–	–	–	–	28 2 7	3 10 0	None yet established.
Tincurry Auxy., Clogheen Union	Do., . .	–	–	133	–	–	–	–	3	6	–	–	–	19 2 0	3 1 6½	4 Course
Lismore, . .	Waterford, .	–	–	30	–	–	–	–	–	–	–	–	–	18 3 0	2 0 0	3 Course
Glasnevin Auxy. North Dub. Un.	Dublin, .	–	–	60	–	–	–	–	–	–	–	–	–	8 1 28	8 0 0	—
Kilkenny, . .	Kilkenny, .	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5 Course
Enniscorthy, .	Wexford, .	–	–	100	–	–	–	–	2	–	–	–	–	33 0 0	3 0 0	—
Dangan Auxy., Galway Union,	Galway, .	–	–	110	–	–	–	–	2	–	–	–	–	18 2 20	2 15 0	7 Course
	For year 1852,	63	38	2355	141	41	25	207	63	349	24	327	899	1,281 2 3		2 Course
	For year 1851,	55	41	1726	118	41	22	181	50	341	19	271	686	1,086 2 11		
	Increase, .	8	3	629	23	–	3	26	13	8	5	56	213	194 3 32		

* Value rent free.
§ Including £40, agriculturist's salary.

† No Returns.
‖ Agriculturist's salary.

AGRICULTURAL SCHOOLS—*continued.*

Expenses of Cultivation.					Results of Cultivation.			
					Total Profit or Loss.		Acreable Profit or Loss.	
Amount paid for Labour.	Value of the free Labour of the Pupils, &c.	Cost of Seeds, Manures, Implements, &c.	Rent, Rates, and Taxes.	Total.	Profit.	Loss.	Profit.	Loss.
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
4 10 10	6 10 0	15 5 2½	4 19 7½	31 5 8	11 0 11½	–	2 5 6	–
8 0 0	–	2 0 0	2 0 0	12 0 0	–	3 6 8	–	1 2 2½
2 15 10	5 12 3	3 18 3	5 13 8	18 0 0	2 2 8	–	0 9 4½	–
5 2 4	10 8 0	6 6 9	10 12 10	32 9 11	10 10 1	–	1 12 4	–
9 10 0	1 5 0	6 10 0	11 0 0	39 5 0	20 2 0	–	2 12 3	–
5 15 9	2 10 0	9 9 7	2 7 3	20 2 7	9 4 3½	–	3 5 1	–
4 7 0	1 0 0	4 17 8	2 3 10½	11 18 6½	8 11 3	–	3 8 5	–
5 1 0½	1 6 0	3 11 5	13 14 11½	23 13 5	0 1 5½	–	0 0 2½	–
30 0 0	10 0 0	12 15 6	12 15 0	65 10 6	17 19 6	–	1 12 1	–
1 12 6	15 0 0	12 7 0	6 13 6	96 19 8	23 6 8	–	5 0 0	–
–	–	–	–	–	–	–	–	–
1 6 8	7 16 0	2 4 9	0 10 0	11 17 5	8 17 6½	–	2 19 6	–
19 0 9½	–	5 7 8½	9 5 10	33 14 4	13 3 2	–	1 5 1	–
31 0 5	4 0 0	1 19 9	6 2 7½	43 2 9½	11 13 0	–	1 0 0	–
1 10 9	0 10 0	1 10 1	3 8 0	6 19 6	4 0 0	–	1 6 8	–
3 1 8	0 10 0	2 1 11½	4 9 6	10 3 1½	1 16 0½	–	0 12 0	–
6 1 11	2 1 6	5 4 8½	7 18 7½	21 6 9	14 5 9½	–	3 3 6	–
9 16 6	–	8 10 5	6 17 6	25 4 5	14 9 9	–	1 16 2½	–
4 10 0	0 10 0	2 19 0	4 0 0	11 10 0	10 10 0	–	1 10 0	–
8 0 0	3 0 0	5 0 0	10 0 0	26 0 0	14 0 0	–	1 0 0	–
9 0 0	0 16 0	6 11 0	–	16 7 0	1 13 0	–	0 2 0	–
16 14 7	0 5 5	1 13 7	9 5 11½	27 19 6½	8 19 3½	–	0 18 4	–
18 10 0	–	5 10 0	10 8 0	34 8 0	3 2 0	–	0 3 0	–
–	38 0 0	17 10 0	46 0 0	101 10 0	32 10 0	–	1 18 3	–
–	–	–	–	–	–	–	–	–
–	6 0 0	10 10 1	25 17 6	42 7 4	34 0 0	–	4 0 0	–
2 14 1	7 16 6	11 16 1	7 8 11	29 15 7	72 11 6	–	9 0 0	–
–	38 3 9	16 17 11	34 17 0	89 18 8	124 4 9	–	9 10 0	–
0 17 6	26 0 0	9 19 0½	10 13 6	47 10 0½	54 12 1½	–	18 12 0	–
1 13 0	36 0 0	16 11 1	26 6 9	80 10 10	147 7 3	–	12 5 7	–
8 8 0	18 17 11	5 7 1½	13 12 4	45 5 4½	49 11 8½	–	5 14 8	–
–	–	–	–	–	–	–	–	–
9 5 6	–	11 13 7	74 4 2½	–	–	15 2 0½	–	1 8 9
0 12 0	34 2 0	3 14 2½	4 7 6	10 0 2½	34 2 0	–	11 5 5¼	–
–	18 0 0	1 14 2½	2 2 0	3 16 2½	18 0 0	–	18 0 0	–
1 14 9	26 8 4	6 0 0	25 0 0	59 3 1	45 0 3	–	4 3 9	–
69 1 1½	140 0 0	20 4 5	72 15 0	302 0 6½	207 3 1½	–	6 11 1	–
§99 17 10½	25 0 0	14 13 1	21 10 1	136 1 0½	25 2 3	–	1 6 5	–
–	46 2 0	38 10 0	40 13 4	125 5 4	16 7 5	–	1 5 4	–
13 16 10	25 0 0	4 11 1	99 15 7	143 3 6	21 6 4	–	0 15 0	–
1 15 0	41 12 0	13 5 11	60 0 0	116 12 11	–	5 16 1	–	0 5 11½
10 6 0	8 0 0	22 8 0	40 0 0	80 14 0	70 0 0	–	3 18 8	–
39 2 0‖	–	14 11 6	64 0 0	117 13 6	11 6 3	–	1 6 10½	–
–	–	–	–	–	–	–	–	–
1 15 0	170 0 0	28 15 11	83 16 0	284 6 4	280 15 7	–	8 10 2	–
–	31 9 8	4 5 0	50 0 0	86 13 8	184 0 5	–	9 18 0	–
1 689 5 8	976 19 0	1,524 10 8	2,224 9 8½	6,406 5 0	2,913 5 3½	141 3 4½	2 3 8¶	
1,339 7 3½	648 8 4½	1,332 3 10½	1,765 12 8½	5,471 5 8½	1,882 0 9	187 0 6	1 11 2	
340 18 4½	328 10 7½	192 6 9½	458 17 0	934 19 3½	1,061 4 6½	35 17 1½	0 12 6	

‡ The crop of the past year was destroyed in the erection of a new building on the grounds.
¶ Net acreable profit.

APPENDIX K. 2. MR. DONAGHY'S REPORT on the GLASNEVIN MODEL FARM.

II. Appendix to Dr. Kirkpatrick's Report.

Glasnevin Model Farm.

Model Farm, Glasnevin, April, 1853.

SIR,—I beg to submit to you my Report of the management of this institution for the year ending October 31, 1852. The following summary shows the number of pupils in agricultural training at the 1st November, 1851, the number since admitted and sent out, and the number in training on 1st November, 1852 :—

	Agricultural Pupils.	Agricultural Teachers.	Total.
At the establishment on November 1, 1851, . . .	45	3	48
Admitted from November 1, 1851, to October 31, 1852, inclusively, . . .	31	4	35
	76	7	83
Left from November 1, 1851, to October 31, 1852, .	34	4	38
At the establishment on November 1, 1852, . . .	42	3	45

Of the 38 pupils and Teachers who left, some of them received appointments as Agriculturists or Land Stewards, others went home to farm on their own or their parents' account, others emigrated to Australia and America, and there are some respecting whose present employment I am not sufficiently informed. Most of them, however, carried with them a large amount of useful and valuable agricultural knowledge, the dissemination of which, in whatever locality or country they may be situated, cannot fail in producing beneficial results. For more particular information regarding the destination of each individual who left, I beg to refer you to a list of their names, appended to this Report.

With regard to the general conduct of the pupils in training during the past year, I am happy to say, that it has been, in general, very satisfactory. With few exceptions they have been very attentive, both to the business of the farm and to the instruction afforded them in the school-room; and, consequently, many of them have made rapid progress in attaining a knowledge of their profession. But they have laboured, for years, under great disadvantages, in consequence of want of accommodation *at the farm;* and the sooner this evil can be remedied the better will it be for *them,* for *those* placed immediately over them, and for the *welfare, in every respect, of the establishment.*

By observing carefully the working of the institution, both before and since the enlargement of the farm, I am fully convinced that this step on the part of the Commissioners has been productive of most important advantages to the pupils. Through its instrumentality the field of operations has been

much more extensive and varied than it was formerly. Not only has the general routine business been conducted on a larger scale, but the pupils have had an opportunity of becoming practically acquainted with the execution of all those works which are consequent on the reclamation and improvement of neglected land—on the proper performance of which subsequent success in its cultivation mainly depends. Other advantages of an equally important nature have emanated, from the enlargement of the farm, in relation to the management of the live stock; and these advantages will be immensely enhanced so soon as the new buildings will have been completed—the delay of which has not only interfered with the progress of the pupils, but has acted most injuriously in relation to the pecuniary returns from the working of the farm. I would, therefore, earnestly entreat you to draw the attention of the Commissioners to this, in my opinion, very momentous matter.

Appendix K. II. Appendix to Dr. Kirkpatrick's Report. *Glasnevin Model Farm.*

Cultivation of the Farm.—In my former Reports I gave diagrams fully explaining the courses of cropping adopted. It is unnecessary, therefore, to repeat them on the present occasion. A summary, however, of the crops cultivated, with the required statistical information regarding them, will be found in the Appendix to this Report. The only remark on this point which I deem requisite is, that, owing to circumstances, steps had to be taken to follow out a five-crop course on that portion of the farm on which a four-crop had been formerly pursued, and *vice versa.*

Management of the Live Stock.—The system followed in relation to the live stock is that of housefeeding. This system has been always pursued here since the commencement of the institution. Some of the reasons why it has been clung to with such tenacity may be thus briefly mentioned. It is believed that by means of it a larger number of stock can be kept on the same extent of land; that the quantity of manure produced by it is capable of keeping up the fertility of the land with very little additional outlay; that the amount of grain of every kind forthcoming through its instrumentality is even greater, in a given number of years, than could be realized by any other system, without great expenditure for extraneous manure; that the dairy cattle give, on an average, throughout the year, as large a return of milk as those pastured in the usual way; and that, on the whole, it is the system best adapted for the general circumstances of Ireland.

Dairy husbandry has heretofore formed the principal object of management; but the fattening of cows (not proving in calf), and of pigs, and the breeding and rearing of both these descriptions of animals, have also been attended to. A pretty large amount of practical knowledge in relation to these matters has, therefore, been afforded to the pupils; but not, in my opinion, on a sufficiently extensive scale; and this must continue to be the case, for want of accommodation, till the

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Glasnevin Model Farm.

dairy cattle be located in the new buildings. When furnishing my last general Report, I was under the impression that I would be able, on the present occasion, to afford some valuable statistical information in reference to the feeding and breeding of live-stock; but the delay which has occurred in fitting up the new buildings has completely upset my plans. I shall, however, avail myself of the earliest opportunities to collect and report useful facts on these important subjects.

In the course of the year a very severe loss was sustained from *pleura pneumonia* among the cattle, which prevailed, occasionally, in a most virulent form, throughout the spring, summer, and autumn seasons. No less than 10 milch cows were taken off by it, notwithstanding the most careful treatment. This is a most formidable disease, and has proved most ruinous to the farming interest in this country for many years past. A detailed statement of the remedial measures adopted here regarding it, would, in my opinion, be of little importance, as it appears to be a disease which, when it has passed the first stage of its progress, and this is not easily known, can very rarely be subdued by the best veterinary surgeons of the day. Moderate bleeding and counter-irritations, accompanied with saline doses of medicine, and linseed or oatmeal gruel, as one or other is required, according to the state of the bowels, seem to be as safe and sure treatment as any other practised.

In addition to those above mentioned, we had one other death from *blain*, making altogether 11 deaths during the year. This will tell severely against the *farm account;* but nothing that the most watchful vigilance or the most skilful treatment could effect was left undone.

Draining.—The extent of ground thorough drained during the past year was about 10 statute acres, part of which was executed by the pupils, and part by hired labourers. The system pursued (and which is that always followed by me), was what is generally called the "parallel" system. The main drains were cut to an average depth of 4 feet 6 inches, the sub-mains to 4 feet 3 inches, and the parallel to 4 feet—the distance allowed between the latter being 24 feet. Pipe-tiles of $1\frac{1}{2}$ inch diameter, with suitable collars, were used in the parallel drains, and 3-inch diameter pipes, with a covering of broken stones, in the main and sub-main drains. I may say, with perfect safety, that nothing can be more satisfactory than the result of the drainage executed in this manner.

Experiments.—As one of the best modes of arriving at facts in agricultural practice consists in chronicling the details of different modes of management in relation to the same crop, or process, and comparing the results one with another, respectively, it has been thought advisable that some experiments should be instituted every year on this farm; and accordingly the following were carried out during the past year.

Experiment No. 1.—This experiment had relation to the growth of Swedish turnips on different *kinds* and *quantities* of manure—taking into account, at the same time, the cost per acre of each. The date of sowing was the 18th of May; the land was of uniform quality throughout—with the exception of plots 10, 11, and 12, which were rather wetter than the others;—and the crop of the preceding year was grain. The following table will show the results as ascertained on the 22nd of November:—

No. of plot.	Kind and quantity of manure applied per statute acre.	Cost of manure per statute acre.	Produce per statute acre.	
			Roots.	Tops.
		£ s. d.	tons. cwt. qrs.	tons. cwt. qrs.
1	No manure,	—	22 0 0	3 17 0
2	32 tons farm-yard manure,	4 16 0	27 8 0	5 0 0
3	16 tons farm-yard manure and 4 cwt. common salt,	2 10 4	25 12 0	5 0 0
4	8 cwt. Ritchie's vitriolized bone compound,	2 16 0	23 11 0	4 12 0
5	16 tons farm-yard manure and 2 cwt. peruvian guano,	3 9 6	26 14 0	5 0 0
6	16 tons farm-yard manure and 3 cwt. superphosphate of lime,	3 10 6	24 0 0	5 4 0
7	16 tons farm-yard manure, 1 cwt. guano, and 1½ cwt. superphosphate of lime,	3 10 0	23 10 0	4 10 0
8	16 tons farm-yard manure, 2 cwt. of guano, and 3 cwt. superphosphate of lime,	4 12 0	25 10 0	4 3 0
9	5 cwt. guano,	2 13 9	23 11 0	4 6 0
10	3 cwt. guano and 3 cwt. of superphosphate of lime,	2 14 9	19 5 0	3 17 0
11	27 tons farm-yard manure,	4 1 0	25 12 0	3 14 0
12	2 tons of a mixture of peat-charcoal and night-soil,	5 0 0	17 3 0	3 1 2

NOTE.—The field on which the above experiment was made, has not yet been thoroughdrained.

In comparing the results in the foregoing experiment with each other, the low produce of plots 10 and 12 forms a rather striking contrast with that of plot 1, to which no manure was applied. The difference may be accounted for to some extent by the circumstance already referred to, viz., that the former plots were *naturally* wetter than the latter plot. Notwithstanding this, I expected a larger return from both than was forthcoming.

It will also be seen that a full application of farm-yard manure (2) produced the greatest produce, at, however, the highest cost, with one exception (No. 12),—manured with a mixture of peat charcoal and night soil; but, in forming an estimate of the real value of farm-yard manure, the good effect which it may be expected to produce, for a number of years to come, on the succeeding crops, is a consideration which should not be overlooked.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Glasnevin Model Farm.

Further, it is worthy of notice that half farm-yard manure, and 4 cwt. of common salt (3), at the lowest cost of all the other manures applied, produced as large a return as 27 tons of farm-yard manure (11); higher than 8 cwt. of vitriolized bone compound (4); within 1 ton 2 cwt. of half farm-yard manure and 2 cwt. of guano (5); rather greater than half farm-yard manure, 2 cwt. of guano, and 3 cwt. of superphosphate of lime (8); short only 1 ton 16 cwt. of full quantity of farm-yard manure (2); and higher than all the others.

Experiment No. 2.—This experiment had reference to the practice, advocated by some agriculturists, of growing carrots among the mangel wurzel crop. With the view of testing the soundness of this opinion, every three drills of mangel were made to alternate with one drill of carrots on a portion of a field originally intended for mangel wurzel only. The description of mangel grown was yellow globe, and of carrots, white Belgian. Both were sowed on the 28th of April, and also the general crop of mangel with which their produce was intended to be compared. The kinds and quantities of manure applied were in each case the same, viz., 17 tons farm-yard manure and 2 cwt. of guano per statute acre. The following were the results, as taken on November 22:—

Mixed Crop,	Mangel, .	21 tons of roots	per statute acre.
	Carrots, .	1 ton 11 cwt.	,, ,,
Unmixed General Crop of Mangel, 31½ tons			,, ,,

The question, then, to be decided is, whether is a produce of 31½ tons mangel, or one consisting of 21 tons mangel and 1 ton 11 cwt. carrots, the more remunerative?

The following calculation of the produce, made at the usual market prices, appears to be the simplest mode of determining the matter, at least in this case:—

31½ tons Mangel, at 14*s.* per						£22	1	0
21 tons ,, ,, ,, . .				£14	14	0		
1 ton 11 cwt. Carrots, at 25*s.* per .				1	18	9	16	12	9
Difference, ...						£5	8	3

A loss of £5 8*s.* 3*d.* per acre would thus appear to result from the practice of *mixed* culture, as compared with the usual mode of growing mangel. No doubt the late season at which the carrots were sowed lessened the produce of this crop; and such would be the result generally if they were not sowed at the proper time. To do this, the land should be prepared and manured at an early season, be formed into drills, and every fourth drill sowed with carrots in the *beginning* of April. The intervening drills should be left without a crop till the *last* week in April, at which time they should be sowed with mangel. This was not the course pursued by me in the above experiment; but it seems a practicable one, though not devoid of a disadvantageous circumstance—the drills being left unoccupied from the beginning to the end of April, would lose *that* freshness which is so useful in pushing forward the young plant.

Experiment No. 3.—This experiment was made on the growth of mangel wurzel at different distances between the plants in the longitudinal rows, but at the usual distance of 28 inches between the drills—the object in view being to ascertain the proper distance to which the plants should be generally thinned. In carrying out the experiment, each plot got the same kind and quantity of manure (17 tons farm-yard and 2 cwt. guano per statute acre), and the same culture throughout the season. The seed was sown on the 29th April, and the crop weighed the third week of November. The following table will exhibit the results; but from the anomaly which appears between the return of plot 5 and the others, and plots 3 and 4, I fear some error has been committed, and intend, therefore, to repeat the experiment:—

No. of Plot.	Variety of Mangel.	Distance of Drills from centre to centre.	Distance of Plants in the drill.	Produce per Statute Acre.
1	Long Red.	28 Inches.	18 Inches.	35 Tons.
2	Do.	Do.	15 do.	33½ do.
3	Do.	Do.	12 do.	32½ do.
4	Do.	Do.	13 do.	31 do.
5	Do.	Do.	10 do.	36 do.

Experiment No. 4.—This experiment was made with the view of ascertaining the comparative effects of Dr. Hodges' prepared saline manure, and farm-yard manure, on the growth of the potato. The variety planted was "Protestants," or "White Rocks," the date of planting 1st April, and of lifting the 12th October. The following results were obtained:—

No. of plot.	Kind of manure applied per statute acre.	Cost of manure per statute acre.	Produce.		Per centage diseased.
			Sound.	Unsound.	
		£ s. d.	tons. cwt. sts.	tons. cwt. sts.	
1	30 tons farm-yard, . .	4 10 0	10 16 6	0 14 3	6¼
2	15 tons do., and 7¼ cwt. saline compound, . . .	4 15 9	10 16 6	0 4 6	2½
3	14½ cwt. saline compound, .	5 1 6	6 0 1	0 2 3	2
4	7¼ cwt. saline manure applied at time of planting, and 7¼ do., as a top-dressing in summer, ...	5 1 6	9 6 1	None.	None.
5	No manure, . . .	—	3 6 0	Do.	Do.

In this experiment very little difference, in respect to produce, resulted from full quantity of farm-yard manure as compared with half the arcable allowance of saline compound and half farm-yard manure. The principal difference was in the cost of each.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Glasnevin Model Farm.

Plot 3, to which the full allowance of saline manure was applied at the time of planting, gave a poor return; whilst the cost was greater than if the full quantity of farm-yard manure had been used. The produce of plot 4, also indicates the propriety of applying half the acreable allowance of saline manure at the time of planting, and the other half as a top-dressing in the summer season. When top-dressing with this manure, care should be taken to strew it evenly over the surface of the soil and not over the plants.

Further, it may be remarked, that the variety of potato used in this experiment, withstood the effects of the potato-disease much better than any other which was cultivated on the farm during the past year.

Experiment No. 5.—This experiment had for its object, the ascertaining of which of the following varieties of potatoes, viz. :—Early Americans, Cumberland Bangors, Ashleaved Kidneys, Lapstone Kidneys, Kemps, and Talavera Blues is capable, under the same treatment, of withstanding the blight most effectually. Each description got an application of 15 tons of farm-yard manure and $7\frac{1}{4}$ cwt. of prepared potato-manure or saline compound. I regret that a statement of the results cannot be given, as most of the tubers in each case, had totally disappeared on the 12th of October.

The annexed Table will show the state of the *general* crop of potatoes at the periods mentioned, viz. :—

Variety of Potato.	Per centage of diseased as taken on 18th August.	Per centage of diseased as taken on 1st September.
Protestants,	3	10
Hampshire Whites,	50	78
Talavera Blues,	25	42
Early Americans,	30	53
Cumberland Bangors,	30	43
Regents,	20	55
Kemps,	60	82
Lapstone Kidneys,	50	36

The variety called "Lapstone Kidney," exhibits a loss in the above Table of 50 per cent. on the 18th August, and of only 36 per cent. on the 1st of September. This result arose from the fact that many of the tubers, had, in the intervening time, totally disappeared from decay.

Experiment No. 7 —The object in view, in instituting this experiment, was to find out which of the commonly cultivated varieties of mangel produced the largest return of roots. The treatment in each case was the same; and the results will be seen from the following Table :—

Variety of Mangel.	When sowed.	When weighed.	Manure per statute acre applied.	Produce per statute acre.
				tons. cwt. qrs.
Long Red, .	April 29th,	Nov. 22nd,	34 tons farm-yard in autumn, and 2 cwt. guano at time of sowing, .	33 15 0
Yellow Globe,	Do.,	Do.,	Do.,	33 2 3
Red Globe, .	Do.,	Do.,	Do.,	35 0 0
Long Yellow,	Do.,	Do.,	Do.,	36 0 0

It will be perceived from the above returns, that Long Yellow and Red Globe Mangel gave the largest produce.

Experiment No. 7.—This experiment had reference to the growth of flax, by applying to the land at the time of sowing the prescribed quantity of Dr Hodges' prepared flax manure. Only half the land was manured; the object in view being to afford an opportunity of judging of the efficacy of the application, by comparing the crop grown on the manured with that grown on the unmanured portion. This object, however, was in a great degree frustrated by the injurious effects of the heavy rains in July, which lodged the crop, and prevented it from ripening evenly. The principal remark, therefore, which I am able to make regarding the experiment is, that up to the period when the crop lodged, I could notice no perceptible difference between the flax growing on the manured and on the unmanured portions. Not having machinery at the establishment to prepare the crop for market, and being situated in a locality where nothing of the kind exists, it was impossible to carry out the experiment to the proper extent. *My* opinion, therefore, can only be looked upon as one formed from carefully observing the development of the crop from the time it was sowed to the time it lodged.

It occurs to me, from the above as well as from other circumstances, that it becomes a matter worthy of your attention in what manner the preparation of flax, for sale in the market, can be best effected at this establishment.

General Remarks.—The permanent improvements which are being effected in the way of roads, draining, &c., are gradually enhancing the value of the land, rendering the labour more easily performed, and in every way tending to develop the agricultural capabilities of the soil.

In the course of the year another addition of about 34 acres was made to the farm; and it is in contemplation to rent about 16 acres more. The farm will then contain an area of about 180 acres—an extent of ground which will be sufficiently large to enable us to exemplify to the pupils the best systems of farm management at present in operation.

As usual, the establishment was visited, during the past year, by many Agriculturists and gentlemen from different parts of the United Kingdom, America, and the Continent,

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Glasnevin Model Farm.

all of whom expressed themselves in very favourable terms in reference to its management and objects. A few of their entries, as extracted from the "Visitors' Book," and also a copy of the remarks of the valuators at the close of the year, are respectfully submitted for your perusal.

Nothing could be more satisfactory than the manner in which both the Steward and the Literary Teacher discharged their respective duties during the year.

During the year two courses of lectures on Agriculture were delivered by me to the agricultural pupils at the establishment, and also two on the same subject to the Literary Teachers in training at the Model Schools in Dublin; whilst the former had, in addition, the privilege of attending a very valuable course of lectures on Botany, delivered by Dr. Harvey, at the Glasnevin Botanic Gardens. Indeed the pupils have derived much benefit, for a number of years back, from Dr. Harvey's annual lectures at the above gardens.

The result of the transactions of the year will be found in the Appendix. Hoping this Report may be found satisfactory,

I am, Sir, with much respect, your very obedient servant,

JOHN DONAGHY,

Superintendent, National Model Farm.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector to the
Commissioners of National Education.

EXTRACTS from the "VISITERS' OBSERVATION BOOK," Glasnevin Model Farm.

"I feel much pleased with my visit to the Model Farm, and feel assured the example set in farming, on scientific principles, will, at no distant day, be of the greatest importance to the United Kingdom. I have likewise to express my thanks for the polite manner in which I have been received by the officers belonging to the place.

"C. M'DONALD, Woolton, Liverpool.

"March 18, 1852."

"We have paid a visit to the Model Farm this day, and have much pleasure in bearing witness to the excellent management which seems to prevail in every department of it. We also desire to express the attention and civility with which we have been received.

"THOMAS CATHER,
"GEORGE CATHER, } Newtownlimavady.

"April 16, 1852."

"I have been very highly gratified by my visit to the Model Farm and new farm buildings to-day. The mode of cropping pursued appears to be well adapted for producing a constant succession of crops of every possible variety, and of the best quality. The farm buildings appear to be admirably arranged, and constructed of the best materials. Such an establishment will be a credit to Ireland, and a model for the United Kingdom.

"JOHN JOS. BURNETT, Gadgirth, Ayrshire.
"April 16, 1852."

"We visited Glasnevin Model Farm this day, and were much pleased with the manner in which it is conducted; and consider that its new buildings (so well arranged), with the additional quantity of land, will be a great improvement to the farm, and a public benefit.

"CHARLES FELGATE.
"THOMAS H. MULACHY.
"DENIS H. BROWN.
"April 17, 1852."

"I have been much pleased with a visit to the Model Farm, and am of opinion that the improvement it is calculated to effect in the character of those engaged in cultivating the soil of Ireland, by introducing a more correct system of agriculture, and training the pupils in habits of exactness and order, must be highly beneficial. I have also been gratified by the kindness with which information respecting the establishment has been conveyed by the Steward, in the absence of the Superintendent.

"THOMAS WOOLLEY, Maidstone, Kent.
"April 23, 1852."

"It has afforded me great pleasure to examine the Model Farm established here; and I cannot help believing that the various educational systems introduced under the sanction of the National Board of Education, will have the effect of elevating the moral character of the Irish people, and, consequently, tend to advance their social position.

"WM. H. MAXWELL BLEWS,
Spring Hill House, Birmingham.
"April 28, 1852."

"As a practical farmer, I have been very much pleased with the crops, &c., which are surprising and most instructive, doing the utmost credit to the Manager, &c., and have been pleased beyond measure with the improvements made since my last visit.

"JAMES PERRIN, St. Austin.
"May 27, 1852."

Glasnevin Model Farm.

"I have had great pleasure in inspecting the Model Farm of Glasnevin, along with the intelligent Steward, Mr. M'Mahon. A more perfect illustration of practical and scientific agriculture combined cannot, I am convinced, be seen elsewhere.

"James Ritchie, C.E., and
Agriculturist, Perth, Scotland.

"June 1, 1852."

"I have not visited this farm for some years, and must say it has improved very much in every way, and that I consider the experiments in progress, so carefully registered, of very high value.

"Charles Wm. Hamilton.

"June 25, 1852."

"I have received much gratification in looking over the farm. There are ample proofs of first-rate farming, and Ireland, at large, cannot fail to receive large instruction from the management of the manure and the rotations of cropping, also the stall feeding.

"John Wigham, Junior,
10, Salisbury-road, Edinburgh.

"7th Month 20, 1852."

"I have looked over the Model Farm this day with much interest, and feel persuaded that the good already accomplished fully justifies the enlargement of the establishment. Every friend of Ireland must wish increasing success to the undertaking.

"George Davidson,
Rector, Normal Institution, Edinburgh.

"July 26, 1852."

"I have this day inspected the whole establishment, and have every reason to say that the crops are most luxuriant, and that the general management of the farm reflects the highest credit upon the Manager.

"John Finnie, Swanstone, near Edinburgh.

"July 26, 1852."

"Having only yesterday visited, in the company of John Hall, Esq., of Galway, the Poor Law Inspector for that district, the *Dangan Industrial Agricultural Schools*, established as an appendage to the Galway Workhouse, it is with peculiar satisfaction that I have inspected, with my practical and intelligent guide, Mr. M'Mahon, the Model Farm at Glasnevin. I thoroughly unite in every word of the admirable and forcible

remarks of Lord Rossmore, under date of 1st June last. The new buildings, and a further intended extension of the farm, will render this one of the most interesting institutions of Europe—at once an especial boon to Ireland, and of excellent value to all persons in any way connected with the poor, either as *magistrates*, *guardians*, or *conductors* of *public establishments* where land forms a part of the produce or occupation of such establishments.

"EDWIN RICKMANN, Mansfield.

"August 20, 1852."

"We have this day visited the Model Farm, along with the Steward, and feel much pleasure in expressing our thorough gratification at the very great precision with which all the experiments relative to the green crops have been carried out, and feel assured that it will be conducive to the benefits of the public.

"JOHN PEARSON, Mount Cross, Co. Cork.
"DR. WILLIAMS, Macroom, "

"August 27, 1852."

"I have had the gratification this day of visiting the Glasnevin Model Farm, and the satisfaction of expressing my confidence that it is destined to accomplish great good for the agricultural interests of Ireland.

"W. C. FOWLER, M.D., &c., &c.,
Amherst College, Massachusetts, United States.

"September 11, 1852."

"I have visited most of the experimental farms in England, but with none have I been more pleased than with this.

"THOMAS DYKE, Monmouth.

"September 14, 1852."

"I have been much gratified by my visit to this Model Farm. The luxuriance of the green crops, their management, and weight of crops, are certainly most creditable to the Manager; in fact it is most gratifying to see how well the details of cropping are carried out. The new offices in course of erection promise to be every way suited for what is intended.

"S. G. MACCULLOCH, Ayrshire, Scotland.

"September 16, 1852."

"I have been over the farm, which has pleased me much. The green crops exceed, for size and good culture, any I have ever seen. The new offices are well calculated for the purposes intended.

"RICHARD CAMPION, Doneraile.

"September 16, 1852."

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Glasnevin Model Farm.

"I have had the gratification this day of examining both the farm and new buildings, and of being favoured with Dr. Kirkpatrick's explanations of the system. All I have seen confirms the reports I had previously heard of the practical efficiency of Glasnevin as an agricultural training institution.

"G. MAKGILL, Kenback, Fifeshire.

"September 23, 1852."

"We have this day had the pleasure of viewing the different arrangements on this farm, and feel gratified in adding our testimony to the completeness of all the arrangements.

"JOSEPH SCOTT, Blackhallwood, Cumberland.
"THOS. BROWN, Cummensdale, ,,
"EDWD. TRIMBLE, Dalston, ,,

"September 27, 1852."

"I have been much gratified to find that so excellent a system of tuition is in use in this Agricultural School, blending science and practice so efficiently. I consider the examination I have witnessed highly creditable to both Teacher and pupils.

"APSLEY PELLATT, M.P.,
Southwark and Staines, Middlesex.

September 28, 1852."

SUMMARY of ATTENDANCE at Glasnevin Model Farm Establishment, from 1st November, 1851, to 31st October, 1852, inclusively.

	Agricultural Pupils.	Agricultural Teachers.	Total.
At the Establishment on 1st November, 1851, ...	45	3	48
Admitted from 1st November, 1851, to 31st October, 1852, . . .	31	4	
	76	7	
Left from 1st November, 1851, to 31st October, 1852, . . .	34	4	
At the Establishment on 1st November, 1852, ...	42	3	45

BALANCE SHEET of the Glasnevin Model Farm for the Year commencing 1st November, 1851, and ending 31st October, 1852.

Dr	*Farm.*	£	s.	d.	*Contra.*	*Cr.*	£	s.	d.
To Amount of Valuation of 1st November 1851,		2,192	18	7	By Sales of Dairy Produce,		431	17	0
,, Implements purchased,		52	14	11	,, Wheat,		25	17	0
,, Live Stock (Cows) purchased,		108	19	0	,, Oats,		144	17	8
,, ,, (Pigs) do.		5	10	0	,, Barley,		4	1	7
,, Seeds do.		69	5	11	,, Beans,		10	3	2
,, Feeding of Horses (farm produce),		120	1	11	,, Potatoes,		17	16	11
,, Feeding purchased Live Stock generally,		48	3	1	,, Carrots,		7	11	3
,, Manures purchased,		34	15	10	,, Parsnips,		0	5	0
,, Rent, Cess, and Poor Rates,		509	13	0	,, Hay consumed by Horses,		29	1	8
,, Salaries and Wages,		75	8	4	,, Cows, fat,		48	16	6
,, Veterinary Surgeon's Bill,		16	18	6	,, Pigs,		114	5	7
,, Miscellaneous Expenses, including General Labour, Repairs, Toll, Smithwork, &c.,		89	9	0	,, Miscellaneous Sales,		11	0	4
,, Permanent Improvements for which cash was paid,		88	2	4	,, Valuation of 1st November, 1852,		3,093	9	6
		3,502	0	5					
Profit on the year,		437	2	9					
		£3,939	3	2			£3,939	3	2

NOTE.—The labour of the pupils is not charged, from the difficulty of accurately estimating its value.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Glasnevin Model Farm.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Glasnevin Model Farm.

OBSERVATIONS on Glasnevin Model Farm, by EDWARD CARROLL, ESQ.

I have known the lands of Glasnevin since a period long antecedent to the establishment of the National Model Farm there. I have since narrowly watched the progress of agricultural improvement in the surrounding localities generally, as well as the progress made on the Model Farm itself, and can now say, fearless of contradiction, that notwithstanding the many prejudices to be combatted, and the many difficulties to be overcome, these surrounding localities have vastly improved in systematic and economical agriculture in consequence of the examples set, and the stimulus afforded on the Model Farm, whilst the ground itself has been improved to a degree unprecedented, and which the most sanguine of its admirers could scarcely have anticipated. That what some considered slight errors in practice had been occasionally discovered on the farm, in its detailed management and improvement, many people contend for. But be that as it may, such trifling errors, if such things existed, have proved of benefit to the pupils there being educated, and the reading public at large, by the legitimate discussion to which they gave rise on the farm itself, as well as through the agricultural press.

As a proof, if such were wanting, of the vast value of the institution, even in its infancy, I would point to the many practical and scientific agriculturists, scattered over Ireland and other countries, professionally engaged on the estates of landed proprietors, and farming successfully either on their own account or in teaching others, contrasting so strongly with others not so educated, and with strangers introduced from other, and by some considered more highly favoured countries, but where no such systems of agricultural education had been known to exist. I am now very close on thirty-five years learning and practising my profession as an agriculturist, horticulturist, valuator, and general improver, and my education has been acquired by much more than ordinary means, and can say now that had such an institution existed in the days of my boyhood, it could, under Providence, have saved me a handsome fortune, expended in acquiring a knowledge of my profession, and turned the best fifteen years of my life to a much greater advantage to myself and others than those to which I could point during that time. As a British subject, but more especially as an Irishman, I am proud to have lived to see the day when such an institution as that now seen at Glasnevin, and others as its auxiliaries, can be pointed to with such decided advantages. It is true, much remains to be done, even in this institution, to keep pace with the age in which we live, and to render it what it might be made under such guidance and direction as now exist—a more leading source in the development of the vast agricultural resources of this

country, and in adding still further to the greatness of the mighty empire which so munificently sustains it by its patronage and support, pecuniary and otherwise.

Edward Carroll.

Beg Erin, Wexford, March 8, 1853.

The preceding appraisement of the stock, crop, cattle, horses, pigs, implements, &c., on the Model Farm of Glasnevin, was made by Mr. Carroll (whose Report is attached to the inventory of articles), and myself, and I believe the same to be a correct and fair valuation.

Manure.—This important material in good farming valued at £287—the produce of the twelvemonths embraced in the valuation, as well as £13 for unexhausted lime (applied in former years), and £22 12*s.* 11*d.* of unexhausted manure in 1852, are also properly put into the inventory.

The permanent improvements per £422 9*s.* 9*d.* (so far as not exhausted), seem also fairly brought forward in the valuation, as marking the progress and extent of ameliorations effected on the Model Farm by means of the public funds voted for this useful purpose, and, of course, to a large extent, by means of the labour of the pupils who are trained and worked upon that farm.

In the preceding, by Mr. Carroll, there is much which, from personal observation and a strict study of the agricultural system of the Irish National Board, I am quite prepared to corroborate. My opinion has been long formed—ever since the adoption of its industrial training; in fact, that steadily, energetically, and extensively carried out, no public available means afforded so rational a prospect of immediate social amelioration in Ireland as the Agricultural System of the National Board, in combination with the excellent system of useful training adopted at the institution in Marlborough-street and at the Glasnevin Model Farm.

I first examined this farm in 1847—I have often inspected it since—and I have no hesitation in saying that I have found the system of training and agricultural operations of the Model Farm progressively improved since 1847. Improvements in agricultural operations, both as regards practice and science, are almost daily going forward; and I confidently expect Glasnevin Model Farm will participate in such movements, and show a wider and still more useful field of operations to engage the study, observation, and labour of the pupils, who are destined soon to go forth throughout Ireland, and to carry with them those well-grounded lessons and useful habits of thought and industry, and methods of farming (which they have obtained at Glasnevin), and which cannot fail to raise Ireland, and the social comforts of her people, to a respectable position in the British Empire before many years.

Thomas Harkness.

Names of Agricultural Pupils and Teachers who left the Glasnevin Model Farm Establishment between 1st November, 1851, and 31st October, 1852, inclusively.

No	Names of Pupils and Teachers.	County to which Pupils and Teachers belong.	Patrons' Names.	County in which Patron resides.	Date of Entrance of Pupils and Teachers.	Date of Leaving of Pupils and Teachers.	Destination on Leaving.	Present Occupation.
1	Andrew M'Knight,	Cavan,	Rev. P. White,	Cavan,	July 6, 1850,	Nov. 16, 1851,	–	Unknown.
2	Matthew Ryan,	Wicklow,	Rev. A. Germain,	Wicklow,	Oct. 15, 1849,	„ 26, „	Appointed as agriculturist to Kyle Park School,	Agriculturist.
3	Patrick Foley,	Limerick,	George Fosbery, Esq.,	Limerick,	Feb. 15, 1851,	Dec. 1, „	Went home to conduct his mother's farm,	Farmer.
4	William Begley,	Antrim,	Mr. Thomas Swan,	Antrim,	June 18, 1850,	Jan. 20, 1852,	Became a literary teacher,	Teacher.
5	Thomas Byrne,	Wicklow,	Miss Mary Grattan,	Dublin,	April 15, 1850,	„ 31, „	Unknown,	Unknown.
6	William Kelly,	Tyrone,	Tristram Kennedy, Esq., M.P.,	Dublin,	May 1, 1851,	Feb. 17, „	Emigrated to America,	Unknown.
7	John Sharpe,	Limerick,	Lord Monteagle,	Limerick,	Jan. 21, 1850,	„ 19, „	Got an appointment as land steward,	Unknown.
8	John Thomson,	Antrim,	Rev. J. Alexander,	Antrim,	May 10, 1850,	„ 20, „	Emigrated to Australia,	Unknown.
9	Alexander Moban,	Antrim,	John Lanktree, Esq.,	Antrim,	March 1, 1850,	March 4, „	Emigrated to America,	Unknown.
10	George Ferguson,	Armagh,	Miss Prentice,	Armagh,	August 6, 1851,	„ 9, „	Left on the plea of going to America,	Unknown.
11	William Wiggins,	Louth,	Sir Frederick Foster,	Louth,	March 9, 1850,	„ 29, „	Got an appointment as land steward,	Land steward.
12	Arthur Bolton,	Galway,	The Hon. Miss Plunket,	Wicklow,	April 15, 1850,	April 16, „	Land steward or manager to the Hon. Miss Plunket,	Land steward.
13	Edward O'Brien,	Kilkenny,	Rev. Martin Doyle,	Kilkenny,	April 2, 1850,	May 11, „	Agriculturist at Dangan Workhouse,	Agriculturist.
14	Robert Holmes,	Galway,	Sir R. L. Blosse, Bart.,	–	Sept. 30, 1850,	„ 17, „	Went home,	Unknown.
15	Michael O'Driscol,	Cork,	Rev. D. O'Sullivan,	Cork,	Jan. 20, 1851,	„ 18, „	Went home to recruit his health—had liberty to return.	
16	Nicholas Berry,	Cork,	Rev. D. Horgan,	Cork,	May 1, 1852,	„ 18, „	Left in consequence of bad health,	Unknown.

17	Edmund Murphy	Waterford,	Rev. Eugene Condon,	Waterford,	May	8, 1850,	„	29, „	Emigrated to America,		Unknown.
18	John Wiseman,	Cork,	Rev. Charles M'Carthy,	Cork,	May	1, 1850,	June	22, „	Went home after having served his apprenticeship,		Unknown.
19	Patrick Keeffe,	Cork,	J. W. Kavanagh, Esq.,	–	March	17, 1852,	„	22, „	Went home—left of his own accord,		Unknown.
20	Michael O'Grady,	Clare,	Robert Studdert, Esq.,	Clare,	July	28, 1851,	July	9, „	Got an appointment as agricultural teacher,		Agr. Teacher.
21	John Grant,	–	Right Hon. Lord Bellew,	Louth,	Oct.	9, 1851,	„	10, „	Retired in consequence of bad health,		Unknown.
22	James Smyth,	Antrim,	Rev. Charles Ward,	Antrim,	June	7, 1850,	„	12, „	Appointed agriculturist at Dunmanway District Model School,		Agriculturist.
23	James M'Gurl,	Leitrim,	Peter La Touche, Esq.,	Leitrim,	May	8, 1850,	„	13, „	Went home after having served his apprenticeship,		Unknown.
24	John Keating,	Antrim,	Rev. C. Ward,	Antrim,	Nov.	12, 1850,	„	26, „	–		Unknown.
25	Robert Berry,	Cork,	The Right Hon. Chief Justice Blackburne,	Dublin,	May	6, 1851,	„	29, „	Left in consequence of bad health,		Unknown.
26	John M'Kay,	Antrim,	Rev. Anthony Cosslet,	Antrim,	June	9, 1851,	„	30, „	Got an appointment as land steward,		Land Steward.
27	James O'Connor,	Kerry,	P. Fitzgerald, Esq., Knight of Kerry,	Kerry,	June	10, 1851,	August	2, „	Got a situation as land valuator under Mr. Griffith,		Land Valuator.
28	Samuel Parker,	Cavan,	Rev. W. Bell,	Cavan,	Jan.	30, 1852,	„	21, „	Left of his own accord—emigrated to America,		Unknown.
29	John M'Caffry,	Cavan,	Rev. P. Clarke,	Cavan,	April	16, 1850,	Sept.	7, „	Went home after having served his apprenticeship,		Unknown.
30	Joseph Mulkern,	Galway,	P. Blake, Esq.,	Galway,	Oct.	22, 1849.	„	13, „	Went home after having served his apprenticeship,		Unknown.
31	Hugh Pettigrew,	Down,	R. O. M'Kittrick,	Down,	Dec.	6, 1850,	„	14, „	–		Lit. Teacher.
32	Thomas Mannion,	Galway,	Rev. P. O'Loughlin,	Galway,	April	13, 1850,	„	20, „	Went home after having served his apprenticeship,		Unknown.
33	Michael Mansfield,	Waterford,	Richard Smyth, Esq.,	Waterford,	July	31, 1850,	„	20, „	Appointed agriculturist to Clonmel Workhouse,		Agriculturist.
34	William Finn,	King's Co.,	Mr. Biddelph,	King's Co.,	July	31, 1850,	„	20, „	Went home after having served his apprenticeship,		Unknown.
35	John Lysaught,	Tipperary,	Caleb Going, Esq.,	Tipperary,	Sept	2, 1850,	„	20, „	Went home after the termination of his apprenticeship,		Unknown.
36	Florence O'Driscol,	Cork,	Rev. D. A. O'Sullivan,	Cork,	Nov.	28, 1850,	„	30, „	–		Unknown.
37	Patrick Mahony,	Kerry,	R. Mahony, Esq.,	Kerry,	Feb.	11, 1850,	„	30, „	Went home after having served his apprenticeship,		Unknown.
38	William Flood,	–	Rev. Charles Ward,	Antrim,	Sept.	17, 1850,	Oct.	12, „	Appointed agriculturist to a Workhouse,		Agriculturist.

TABULATED RETURNS of the CROPPING of Glasnevin

Crops Cultivated.	Extent of Ground under each, Statute Measure. A. R. P.	Time of Sowing or Planting.	Time of Cutting, Pulling, or Lifting.
Wheat,	2 2 21	December 9, 1851,	Third week in August,
Black Barley,	1 3 8	December 11, 1851,	First week in August,
Bere,	1 0 0	December 20, 1851,	First week in August,
Oats,	33 3 28	Russian Dun on October 21, 1851, and the other varieties in March, 1852,	Russian Dun cut on August 10; the other varieties a week later,
Flax,	1 0 0	April 20,	August 14,
Potatoes,	4 0 1	December, 1851,	Middle of October,
Turnips: Swedes,	9 2 36	May,	November and December,
Soft varieties,	1 2 39	June,	Latter part of October and beginning of November,
Mangel,	9 0 8	Last week of April,	December and January,
Beet,	0 0 18	Do.,	December,
Carrots: General Crop of,	1 2 32	March 22,	Ditto,
Grown with Mangel,	0 1 32	Latter part of April,	Ditto,
Parsnips,	0 0 37	March 22,	Sold from time to time,
Kohl-Rabi,	0 0 9	April 29,	December,
Cabbage,	4 1 36	At different seasons,	Various,
Vetches,	4 3 3	Some in autumn, 1851; others in spring, 1852,	Varied with the time of sowing,
Beans,	5 0 24	Winter beans, on October 27, 1851; and Heligoland, on February 28, 1852,	Russian or winter beans in August, Heligoland on September 20,
Grass,	28 3 18	See last year's report,	Commenced to cut for soiling early in May, and continued cutting for the same purpose, with occasional interruptions, to Christmas. The portion intended for hay was saved in July.*

* The cattle got one, sometimes two, feeds in the day of grass, in the months of October, oats and Italian rye grass. After the oats were harvested, the crop grew so very luxuriantly that it have resulted from the proceeding. As the principal crop was oats, the area of ground is not

NOTE.—The content of vegetable, fruit, and nursery gardens, enclosed yard for cattle at old acres rented last summer, 1852, and in grass, &c., is not included in the above Table.

Model Farm, for the year ending 31st October, 1852.

Quantity of Seed per Statute Acre.	Average Produce per Statute Acre.	Estimated Cost of Labour.	Observations.
7 stones, .	10¼ barrels, . .	Average acreable charge, exclusive of seed, rent, &c. :—in four-crop course, £1 17*s.* 1*d.*; in five-crop course, £1 12*s.* 1*d.*; and in six-crop course, £2 1*s.* 7*d.*	A good crop.
7½ stones, .	6 barrels, . .		A very poor crop.
9 stones, .	–		A good crop, but it lodged.
7 stones, .	12 barrels average, .		A splendid crop, but some of it lodged.
3 bushels nearly,	Not yet determined as regards the fibre; 12 bushels of seed,		A good crop, but it lodged in July from the heavy rains.
About 12 cwt., .	Various, . . .		An excellent crop till attacked with the disease.
4 lbs., . .	Various — see results of experiments,	–	Crop good.
3½ lbs., . .	Various, . . .	–	Do.
4 lbs., . .	Various — see results of experiments,	–	An excellent crop.
4 lbs., . .	White Silesian, 26¼ tons, Dark red, 14 „ Dark crimson, 22½ „	–	A very good crop.
6 lbs., . .	White Belgian, 22½ „ Orange, 11 tons 2 cwt.,	–	A tolerably good crop. A very poor crop.
6 lbs., . .	White Belgian, grown with Mangel, 6¼ tons,	–	Unfavourable return.
6 lbs., . .	15¼ tons, . .	–	A good crop.
3½ lbs., . .	Green-topped, 20 tons, . Purple-topped, 18¼ tons,	–	A good crop.
–	Not taken, . .	–	On the whole, a very good crop.
2½ bushels, .	20 tons, average, . .	–	Crop excellent.
2 bushels, average,	Estimated at 10 barrels, .		Russian beans a good crop, but suffered to some extent from the aphis; the Heligoland to an extreme from the same insect.
Stated in last year's report,	13 tons, in a green state, average,	–	A good crop in general.

November, and December, off a field of about 10 statute acres, sowed in spring, 1852, with
was considered prudent to cut and use it. This was done, and no evil consequences appear to
included under the term "Grass," in the above Table.
buildings, roads, uncropped ground occupied by materials for new buildings, and about 21 Irish

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Glasnevin Model Gardens.

3. GLASNEVIN (Model Farm) GARDEN and NURSERY.

January, 1853.

SIR,—I beg to submit the following Report for the year 1852, on the Horticultural department of the Glasnevin Agricultural Training Establishment.

In my Report for 1851, I fully detailed the system of cultivation adopted, and which still continues unchanged.

The only matter of importance in connexion with the past year's cropping is the experiments instituted (at your suggestion) to test the comparative effects of saline with other manures on the growth of potatoes, which resulted in establishing the superiority of farm-yard manure over all the others, and in showing the inefficiency of the saline compound either in promoting the growth of the crop, or preventing the ravages of the blight. There was another experiment tried on the pulling of the stalks, with a view to intercepting the progress of the disease. This was tried on three separate plots of ground, and on six different varieties of potatoes with the most beneficial results. I beg further to remark, that I have been in the habit of following this practice year after year, since the first appearance of the disease, with the same success.

The following is the report furnished to me by the pupil who acted as Monitor during the week in which the crops were lifted, and who carefully superintended the business of ascertaining the results of these experiments, by carefully weighing the produce of each plot:—

Glasnevin Model Farm, September 20, 1852.

SIR,—I beg to furnish you with a statement of the results of the experiments on the growth of potatoes with saline manure in conjunction with farm-yard, as ascertained in the garden attached to the Model Farm. Four rows of each variety of potatoes were tried in the following order, viz.:—

Varieties.	Drills.	Manure.	Produce.
			lbs.
Copper Kidneys,	1st,	No manure,	8
	2nd,	Saline manure, full quantity,	8
	3rd,	Half saline and half farm-yard manure,	9½
	4th,	Farm-yard manure, full quantity,	20
Kemps,	1st,	No manure,	16
	2nd,	Saline manure, full quantity,	16
	3rd,	Half saline and half farm-yard manure,	21
	4th,	Farm-yard manure, full quantity,	22½
Forty-folds,	1st,	No manure,	9¾
	2nd,	Saline manure, full quantity,	9½
	3rd,	Half saline and half farm-yard manure,	13
	4th,	Farm-yard manure, full quantity,	19½

As to the other experiment, I may remark that where the stalks were pulled in due time, there was found to be 201 sound to 13 un-

sound potatoes, or, in other words, but 6½ per cent. diseased. The reverse was the case where they had not been pulled at a proper period—thus showing the great advantage derivable from attending to this simple, though useful remedy.

WILLIAM FLOOD,
Monitor Pupil.

To Mr. Alexander Campbell, Horticulturist.

Since my last Report, it was found inconvenient to take away the pupils from the garden at the Model Farm to work the small garden at the Training Establishment—the latter was, therefore, given up in September last, and is now under the management of Mr. Hawe. It affords me much pleasure to say, that the conduct of the Monitors, and the pupils in general, during the past year, has been most satisfactory, there having been but one occasion during that period of reporting any of them for the slightest misconduct.

The delay in the completion of the new farm buildings has prevented the carrying out of the important additions and improvements in the horticultural department, alluded to in my last Report, it being necessary first to get all the stock of pigs, cattle, &c., removed from the old yard previous to commencing operations; but as the buildings in question will soon be completed, those improvements will, I trust, have made considerable progress before the termination of the present year.

I most respectfully beg to suggest, for your consideration and that of the Commissioners, the utility of planting a small arboretum on one of the borders leading to the new buildings. If such were established, and the different trees and shrubs correctly labelled, the pupils would soon become acquainted with the more useful trees and shrubs. If a portion of ground were set apart for experimental purposes, where the merits of all new vegetables, manures, &c., could be tested, it would become a very useful addition to the establishment.

With respect to the nursery, stated in my last Report as having been commenced, I regret to say, that from the cause before alluded to, and from the exposure of the portion of ground selected for the purpose, but little progress has been made beyond getting in a first-rate collection of all the finest varieties of fruit trees, fruit tree stocks (to practise the pupils in the art of budding, grafting, and training), and young forest trees. In the course of the ensuing year we purpose getting in seeds of all kinds of trees and shrubs, so that the pupils may become acquainted with their management in all stages of their growth.

I herewith enclose the "Balance Sheets" of the kitchen garden and nursery accounts separately, as I consider that it will be more satisfactory to keep each account distinct. With respect to the former, I may observe, that from there being no means of disposing of the produce except to wholesale green grocers and other parties who deal in vegetables, and who must have a large profit on every transaction, it is impossible

to get any thing like a remunerative price for the produce. This, together with the great loss sustained in the potato crop by the blight, which attacked them before they came to maturity, causes the profits to be lower than I anticipated. I may remark, that such crops as asparagus and sea-kale have not as yet made any return, in the way of profit, for the ground they occupy. I expect they will do so, to a considerable extent, during the next year; but it cannot be expected that a *Nursery* will make any return for the first year or two, though afterwards it may become very profitable.

Hoping this Report may be found satisfactory,

I have the honour to be, Sir, your very obedient servant,

A. CAMPBELL,
Horticulturist.

Thomas Kirkpatrick, Esq., M.D.,
Inspector of Agricultural Schools, &c.

BALANCE SHEET of the KITCHEN GARDEN attached to the MODEL FARM, for the Year commencing 1st January, 1852, and ending on 31st December, 1852, containing 2 Acres, 1 Rood, and 22 Perches, of which 2 Roods, 7½ Perches are under Trees and Hedges, leaving 1 Acre, 3 Roods, 14½ Perches available for cultivation.

Dr. GARDEN.

	£	s.	d.
To Amount of Valuation, 1st January, 1852,	56	17	0
,, Seeds,	7	8	11
,, Manure,	8	17	4
,, 1 Hotbed Frame and Sashes,	3	0	0
,, Gate and Paling,	1	5	0
,, Cart-hire and Labour,	1	18	0
,, Wall Nails,	0	0	9
,, Tobacco, for fumigating,	0	0	9
,, Rent and Taxes,	16	8	9
,, Profit and Loss for Balance, being gain on the year,	20	1	11
	£115	19	3

CONTRA.

	£	s.	d.
Cr.			
Sales of Produce,	44	6	11
By Amount of Valuation, 1st January, 1853, viz.:			
,, Implements,	3	5	0
,, Asparagus, Sea-kale, and Rhubarb,	25	10	0
,, 36 Tons Manure, at 3*s.* per ton,	5	8	0
,, 800 Dozen Cabbages, at 2*d.* per dozen,	6	13	4
,, 60 do. Broccoli, at 4*d.* per do.,	1	0	0
,, 7 Tons Table Turnips, at 15*s.* per ton,	5	5	0
,, Celery and Spinach,	1	0	0
,, Onions, Leeks, Potherbs, &c.,	2	15	0
,, Strawberry Plants,	5	0	0
,, Fruit Trees,	5	6	0
,, 4 Hotbed Frames,	9	5	0
,, Permanent Improvement, Gate & Paling,	1	5	0
	£115	19	3

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report on Glasnevin Model Gardens.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Glasnevin Model Gardens.

BALANCE SHEET of the NURSERY attached to the MODEL FARM, Glasnevin, containing 3 Roods, 34 Perches.

Dr.

NURSERY.

	£	s.	d.
To Amount of Cutting and Filling Drains,	5	19	6
,, Draining Pipes,	3	14	0
,, Seed Potatoes,	0	14	0
,, Young Trees,	7	11	4
,, Passage to and from Liverpool to purchase the above,	1	10	0
,, Carriage of do. from Liverpool to the Model Farm,	1	0	6
,, Manure,	3	0	0
,, Rent and Taxes,	4	19	7
	£23	8	11

Cr.

CONTRA.

	£	s.	d.
By Amount of Cabbages sold,	2	10	0
,, Potatoes do.,	0	6	6
,, 1 Araucasia Imbricata,	0	2	6
,, Permanent Improvements in Draining, &c.,	9	13	6
,, Valuation Young Trees,	7	11	4
,, Profit and Loss for balance, being loss,	8	5	1
	£28	8	11

DIAGRAM illustrating the Six-course Rotation of Cropping at present carried out on the GLASNEVIN INDUSTRIAL SCHOOL GARDEN, for a period of Six Years, after which the Rotation recommences, and the Crops follow each

	No. 1.	No. 2.	No. 3.	No. 4.	No. 5.	No. 6.
FIRST YEAR.	Early table turnips sown in succession from April, and succeeded by nonpareil cabbage of the July sowing, in rows twenty-eight by fourteen inches in the line; to be interlined the ensuing March with early potatoes.	Nonpareil cabbage planted in September, after peas, beans, onions, and leeks, interlined in April with nonpareil, to be reinterlined in June and July with celery in succession in the alternate rows. The cabbage should be taken up before they injure the celery. The other alternate rows may be planted with drum-head lettuce of the April sowing.	Peas, beans, onions, and leeks. Sow peas and beans in succession from November to end of June, in drills four feet apart; and in March sow onions and leeks in five-feet beds, with eighteen-inch alleys. When taken off in September, they are to be followed by nonpareil cabbage, in rows twenty-four by fourteen inches in the line.	Early cauliflower planted out in October, after carrots, parsnips, and red beet, interlined in April with nonpareil, fourteen inches in the line, which are, in their turn, to be reinterlined in June and July with early and late white broccoli, Savoy, and borecole, from plants sown the second week in March.	Carrots, parsnips, and red beet, in drills fifteen inches apart. The carrots and parsnips may be sown the first or second week of March, and the red beet the first or second week of April. When lifted in October, the ground is to be highly manured, deeply dug, and planted out with early cauliflower, twenty-four by sixteen inches apart.	Early cabbage, out in September, twenty-eight by fourteen inches apart, after early table turnips of the former year, interlined in March with early potatoes. The cabbage will be ready for use in May, just as the potatoes begin to appear above ground, and should be taken off, and the potatoes forked between, and slightly moulded. The potatoes are to be succeeded in the end of July by white stone or orange jelly turnips, in drills from twelve to fourteen inches apart.
SECOND YEAR.	Early cabbage planted out in September, after early table turnip, interlined in March with early potatoes. The cabbage will be ready for use in May, just as the potatoes begin to appear above ground, and should be taken off, and the potatoes forked between and slightly moulded. The potatoes are to be succeeded in July with white stone or orange jelly turnips, in drills, from twelve to fourteen inches apart.	Early table turnips sown in succession from April, and succeeded by nonpareil of the July sowing, in rows twenty-eight by fourteen inches in the line, to be interlined the ensuing March with early potatoes.	Nonpareil cabbage, planted in September, after peas, beans, onions, and leeks, interlined in April with nonpareil, to be reinterlined in June and July with celery in succession in the alternate rows. The cabbage should be taken off before they injure the celery. The other alternate rows may be planted with drum-head lettuce of the April sowing.	Peas, beans, onions, and leeks. Sow peas and beans in succession from November to end of June, in drills four feet apart; and in March sow onions and leeks in five-feet beds, with eighteen-inch alleys. When taken off in September, plant nonpareil, in rows twenty-four by fourteen inches in the line.	Early cauliflower planted out in October, after carrots, parsnips, and red beet, interlined in April with nonpareil cabbage, fourteen inches in the row, which are, in their turn, to be reinterlined in June and July with early and late white broccoli, Savoy, and borecole, from plants sown the second week in March.	Carrots, parsnips, and red beet, in drills fifteen inches apart. The carrots and parsnips may be sown in the first or second week of March, and the red beet the first week of April. When lifted in October, the ground is to be highly manured, deeply dug, and planted out with early cauliflower, twenty-four by sixteen inches apart.
THIRD YEAR.	Carrots, parsnips, and red beet, in drills, fifteen inches apart. The carrots and parsnips may be sown the first or second week of March, and the red beet the first week of April. When lifted in October, the ground is to be highly manured, deeply dug, and planted with early cauliflower, twenty-four by sixteen inches apart.	Early cabbage, planted out in September, after early turnips, interlined in March with early potatoes. The cabbage will be ready for use in May, just as the potatoes begin to appear above ground, and should be removed and the potatoes forked between and slightly moulded. The potatoes are to be succeeded in the end of July by white stone or orange jelly turnips, in drills from twelve to fourteen inches apart.	Early table turnips sown in succession from April, and succeeded by nonpareil of the July sowing, in rows twenty-eight by fourteen inches in the line, to be interlined the ensuing March with early potatoes.	Nonpareil cabbage planted in September, after peas, beans, onions, and leeks, interlined in April with nonpareil, to be reinterlined in June and July with celery in succession in the alternate rows. The cabbages should be removed before they injure the celery. The other alternate rows may be planted with drum-head lettuce of the April sowing.	Peas, beans, onions, and leeks. Sow peas and beans in succession from November to end of June, in drills four feet apart; and in March sow onions and leeks in five-feet beds, with eighteen-inch alleys. When taken off in September, plant nonpareil in rows twenty-four by fourteen inches in the line.	Early cauliflower planted out in October, after carrots, parsnips, and red beet, interlined in April with nonpareil cabbage, fourteen inches in the line, which are, in their turn, to be reinterlined in June and July with early and late white broccoli, Savoy, and borecole, from plants sown the second week of March.
FOURTH YEAR.	Early cauliflower planted out in October, after carrots, parsnips, and red beet, interlined in April with nonpareil cabbage, fourteen inches in the line, which are, in their turn, to be reinterlined with early and late white broccoli, Savoy, and borecole, from plants sown the second week in March.	Carrots, parsnips, and red beet, in drills fifteen inches apart. The carrots and parsnips may be sown the first or second week of March, and the red beet the first week in April. When lifted in October, the ground is to be highly manured, deeply dug, and planted with early cauliflower, twenty-four by sixteen inches apart.	Early cabbage planted out in September, after early table turnips, interlined in March with early potatoes. The cabbage will be ready for use in May, just as the potatoes begin to appear above ground, and should be removed, and the potatoes dug between and slightly moulded. The potatoes are to be succeeded in the end of July by white stone or orange jelly turnips, in drills from twelve to fourteen inches apart.	Early table turnips sown in succession from April, and succeeded by nonpareil of the July sowing, in rows twenty-eight by fourteen inches in the line, to be interlined the ensuing March with early potatoes.	Nonpareil cabbage planted in September, after peas, beans, onions, and leeks, interlined in April with nonpareil, to be reinterlined in June and July with celery in the alternate rows. The cabbage should be removed before they injure the celery. The other alternate rows may be planted with drum-head lettuce of the April sowing.	Peas, beans, onions, and leeks. Sow peas and beans in succession from November to end of June, in drills four feet apart; and in March sow onions and leeks in five-feet beds, with eighteen-inch alleys. When taken off in September, plant nonpareil in rows twenty-four by fourteen inches in the line.
FIFTH YEAR.	Peas, beans, onions, and leeks. Sow peas and beans in succession from November to end of June, in drills four feet apart, and in March sow onions and leeks in five-feet beds, with eighteen-inch alleys. When taken off in September, plant nonpareil in rows, twenty-four by fourteen inches in the line.	Early cauliflower planted out in October, after carrots, parsnips, and red beet, interlined in April with nonpareil cabbage, fourteen inches in the line, which are, in their turn, to be reinterlined with early and late white broccoli, Savoy, and borecole, from plants sown the second week of August.	Carrots, parsnips, and red beet, in drills fifteen inches apart. The carrots and parsnips may be sown the first or second week of March, and the red beet the first week of April. When lifted in October, the ground is to be highly manured, deeply dug, and planted with early cauliflower, twenty-four by sixteen inches apart.	Early cabbage planted out in September, after table turnips, interlined in March with early potatoes. The cabbage will be ready for use in May, just as the potatoes begin to appear above ground, and should be removed, and the potatoes dug between and slightly moulded. The potatoes are to be succeeded in the end of July by white stone or orange turnips, in drills from twelve to fourteen inches apart.	Early table turnips sown in succession from April, and succeeded by nonpareil of the July sowing, in rows twenty-eight by fourteen inches in the line, to be interlined the ensuing March with early potatoes.	Nonpareil cabbage, planted out in September, after peas, beans, onions, and leeks, interlined in April with nonpareil, to be reinterlined in June and July with celery in succession in the alternate rows. The cabbage should be removed before they injure the celery. The other alternate rows may be planted with drum-head lettuce of the April sowing.
SIXTH YEAR.	Nonpareil planted out after peas, beans, onions, and leeks; interlined in April with nonpareil, to be reinterlined in June and July with celery in succession in the alternate rows. The cabbage should be removed before they injure the celery. The other alternate rows may be planted with drum-head lettuce of the April sowing.	Peas, beans, onions, and leeks. Sow peas and beans in succession from November to end of June, in drills four feet apart; and in March sow onions and leeks in five-feet beds, with eighteen-inch alleys. When taken off in September, plant nonpareil in rows, twenty-four by fourteen inches in the line.	Early cauliflower planted out in October, after carrots, parsnips, and red beet, interlined in April with nonpareil cabbage, fourteen inches in the line, which are, in their turn, to be reinterlined with early and late white broccoli, Savoy, and borecole, from plants sown the second week of August.	Carrots, parsnips, and red beet, in drills fifteen inches apart. The carrots and parsnips may be sown the first or second week of March, and the red beet the first week of April. When lifted in October, the ground is to be highly manured, deeply dug, and planted out with cauliflower, twenty-four by sixteen inches in the line.	Early cabbage, planted out in September, after early table turnips, interlined in March with early potatoes. The cabbage will be ready for use in May, just as the potatoes begin to appear above ground, and should be removed, and the potatoes dug between and slightly moulded. The potatoes are to be succeeded in the end of July by white stone or orange jelly turnips, sown in drills from twelve to fourteen inches apart.	Early turnips sown in succession from April, and succeeded by nonpareil of the July sowing, in rows twenty-four by fourteen inches apart, to be interlined the ensuing March with early potatoes.

4. GLASNEVIN INDUSTRIAL NATIONAL SCHOOL.

January, 1853.

SIR,—I beg to submit to you my report on the Industrial Department of this School for the year 1852.

I. *Course of Cropping.*—The "six-course rotation," mentioned in my last report as in progress of being carried out on the 6 divisions of the School or Model Garden, has been attended with the most satisfactory results, and enabled me to harvest, within the same year, 11 crops of a superior quality, without interfering, in the slightest degree, with those that were to succeed them in the rotation the ensuing year. However, since the addition of that portion of the gardens, lately under the superintendence of Mr. Campbell, I have introduced a considerable change, which will enable me to grow a greater variety, and, at the same time, raise an increased number of "intercalary" or stolen crops. To afford every facility to persons desirous of adopting a similar course of vegetable cropping, I have been induced to enter very minutely into the various details of the present course, both by diagrams and explanation.

[*See Diagram facing this page.*]

Division 1.—Sow early turnips in succession from March, either broadcast or in drills, from 12 to 14 inches apart. For the very early sowings select green and white Dutch, and for the late, the whitestone or orange jelly. Where the very early sowings have been, make the July sowing of nonpareil cabbage, which, with the late sowings of turnips, shall have been taken off in August. The ground should now be well manured and planted out in September, with nonpareil cabbage in rows, 28 by 14 inches in the line, and taken from plants of the last-mentioned sowing.

Division 2.—Nonpareil cabbages planted in September after onions, leeks, peas, and beans. In April fork between the rows, and mould and interline them with nonpareil of the August sowing, 14 inches in the line; when taken off in May and June, fork between, and mould the interlining plants, which are, in their turn, to be re-interlined in the alternate rows with celery, in succession from the first week of June to the end of July. For an early supply of celery, the plants are obtained from seed, sown the first week in March, on a hot bed, made for the purpose of forcing early horn carrots, early turnips, radishes, lettuce, mustard, cress, &c., &c. Plants for the general or late crops are obtained from seeds sown in March with the general crop of onions.

The cabbage will protect the celery from the scorching heat of the sun, enable it to strike root more freely, and establish itself firmly in the soil, and may be taken off in July, if required for use; or tied with bass mat, as recommended in the case of the potato (Division 6), and for a similar reason.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Glasnevin Industrial School.

Division 3.—Sow peas and beans in succession from November to the end of June, in drills 4 feet apart; the mazagan bean is particularly adapted for the early sowings, but, for the late or general sowings, the long pod and broad Windsor are much preferable; and, for the several sowings of peas, Woodford's green marrow is highly recommended. Make each successional sowing of these crops, when the last, or preceding sowing, has begun to appear above ground.

In March, from the 15th to the 20th, sow onions and leeks in 5 feet beds with 18-inch alleys, which, when the beds have been raked and neatly dressed, are to be forked, well broken, and planted out with nonpareil or early cauliflower of the August sowing.

The onions, leeks, peas, and beans, should have been removed in the end of August; the ground should then be well manured, forked over, well pulverized, and planted out in September with nonpareil cabbage of the July sowing, in rows 24 by 14 inches in the line.

Division 4.—Early cauliflowers planted out in October after the removal of carrots, parsnips, and red-beet, in rows 24 inches apart by 16 inches in the line, and taken from plants sown the second week of August. In January or February any vacancies occasioned by the severity of the weather or other causes, should be replaced by lifting the strongest plants in the nursery, with large balls attached to the roots, and carefully planting them in the vacant spaces. In the end of April, fork between, mould, and interline them with nonpareil cabbage of the same sowing, 14 inches in the line, which are, as the cauliflowers have been drawn off, to be dug between, moulded, and reinterlined with borecole, Savoy, or the early and late white broccoli, taken from plants sown in March and April. Plant the late white broccoli in that portion of the ground intended for peas and beans, as these crops can be sown in succession between the alternate rows of broccoli, which will protect the early sowings from the action of frost, and shall have been removed before the peas and beans suffer the slightest injury.

Division 5.—Carrots, parsnips, and red beet, sown and succeeded as directed in the diagram; they should be lifted in fine weather, dried in the sun, and carefully packed in sand, if required to be kept over for future use.

Division 6.—Nonpareil cabbage planted out in September in rows 28 by 14 inches in the line, and taken from plants sown the second week of July, and transplanted into a nursery in August. The transplanting is a process of the utmost importance, and should on no account be neglected; as the plants become hardier, more bushy, disposed to form fine solid heads, and not inclined to run to seed, a matter of too frequent occurrence, especially with the July sowing, if allowed to remain in the seedling bed till required for use. In the end of February, or early in March, the cabbages are to be dug between, moulded, and interlined with early potatoes. They

will be ready for use in May, just as the potatoes begin to appear above ground, and should be removed, in order that the potatoes may become strong vigorous plants, by receiving a free circulation of the air, and the full benefit of the sun, and not rendered delicate or "drawn up," as if allowed to remain in the shade. If they are not required for immediate use, each alternate drill might be "drawn off," and the loose leaves of the others neatly gathered round the heads in their order, and tied with bass mat; the tying will relieve the potatoes, improve the quality of the cabbages, and accelerate their ripening, by promoting a process of *blanching*. As the rows have been taken off, fork between and mould the potatoes, which, in their turn, will have attained full maturity in the end of July or first week of August; they should now be taken up, and succeeded IMMEDIATELY by white stone or orange jelly turnip, in drills from 12 to 16 inches apart, the ground having been previously levelled, forked over, and well broken; the turnips will be ready for table in October, and may be taken off, as required for use. In December, when heavy frosts set in, any remaining unrooted, should be lifted and carefully packed in sand, as they are the only delicate turnip for culinary purposes till the early sowings of the succeeding year. To have the ground in fine condition for carrots, parsnips, and red-beet, the crops following next in the rotation, it should be trenched up in high ridges to expose a large surface to the action of the frost and atmosphere; at the time of trenching add lime to kill the red worm, and "sweeten the soil," by entering into chemical combination with any acids it may contain, and decomposing those salts so injurious to vegetation, such as sulphate of copper, sulphate of iron, &c. &c.

By this system of cropping 12 full grown crops shall have been harvested within the same year, without taking into account the preparatory crops which occupy the ground for the succeeding year.

II. *Permanent Improvements.*—Improvements of this kind were executed during the past year to a very considerable extent. They consisted chiefly in trenching, remaking old walks, running a new walk in front of school and leading to the gardens, lifting and relaying box edging, planting espalier and wall-fruit trees, propagating and planting out standard roses, and making a permanent plantation of rhubarb, sea-kale, asparagus, gooseberries, currants, and raspberries.

The trenching was executed in that portion of the gardens allocated to Mr. Campbell and the Teachers in training, and lately placed under my charge, in order to enable me to grow rhubarb, sea-kale, asparagus, gooseberries, currants, raspberries, and the coarser kinds of vegetables more extensively; and to devote the School or Model Garden to the cultivation of the more delicate sorts, such as cauliflower, broccoli, table turnips, parsnips, carrots, peas, beans, celery, &c. &c. It consists of 6 divisions with 2 small borders, and contains an area of 1½ roods Irish; four of these divisions were deeply

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Glasnevin Industrial School.

trenched, highly manured, and planted out with rhubarb, sea-kale, asparagus, gooseberries, currants, and raspberries, in the order specified in the annexed diagram :—

DIAGRAM showing the arrangement of Sea-kale, Rhubarb, Asparagus, Raspberries, Currants, Gooseberries, &c.

Permanent plantation of asparagus in rows 4 feet apart, with plants 1 foot in the line, and placed "zig-zag," as in the case of the sea-kale. 13 drills with 100 plants in each, making a total of 1,300.	Permanent plantation of rhubarb in drills 4 feet apart and same distance in the line, 5 drills consisting of 2 drills of the Victoria, 2 of the Linæus, and 1 of the Royal Albert. Total, 75 plants.	Permanent plantation of sea-kale in drills 4 feet apart, with plants 1 foot in the line, and placed zig-zag in double rows, as in the case of beans, thus :— and consisting of 10 drills with 100 plants in each. Total 1,000
18 rows of gooseberries 6 by 4 feet in the line. 18 rows, 10 plants in the row, making a total of 180. Each row consists of a different variety of fruit of the most improved sorts.	Currants; 4 rows black, 1 of white, and 1 of red. 18 plants in the line, making a total of 108.	4 rows of raspberries 6 feet apart, and 4 in the line. 18 stools in each row, making a total of 72.
To be devoted to the growth of the coarser kinds of garden vegetables, such as Swedes and flat Dutch cabbage.		To be devoted to the growth of the coarser kinds of garden vegetables, such as Swedes, flat Dutch, and potatoes.

In consequence of the imperfect state of the walks of the School-garden, I thought it advisable to remake them : for this purpose, all the edgings were lifted and relaid, and the bottoms of the walks picked, levelled, and covered with broken stones, over which, when rolled, was placed a deep coating of gravel. In this, as in all the operations connected with the garden, the pupils of the industrial class performed the greater portion of the work. In order to afford a convenient passage to persons visiting the gardens, a new walk has been run in front of the school, and leading from the entrance gate ; it adds very much to the neatness of the place, and forms a considerable improvement in its appearance.

The espalier and wall-fruit trees, consisting of apples, pears, plums, cherries, and peaches, have been planted in the precise order of the arrangement laid down in my Report for the year 1851. They have, with one or two exceptions, become fine healthy plants, and are, at present, in a very promising condition.

To instruct the pupils in the operation of budding, some briers were procured in January, 1852, placed in a nursery, and worked upon in June with buds of the most select kinds of roses; they have done extremely well, are now placed out AS STANDARD ROSES, round the borders of the garden, and in front of the school, and will exhibit a very gay and cheerful appearance when in bloom, during the summer and autumn months.

III. "*Industrial Class.*"—During the past year, no difficulty was experienced to induce the advanced pupils of the school to become and continue members of this class, which, at present, consists of 15 pupils, whose general conduct, and attention to the duties of the industrial and literary departments, have been highly creditable and most satisfactory. They attended in the gardens, with the greatest punctuality, even during the Christmas, Easter, and Midsummer *vacations*; and even, when required, frequently remained after hours, and *cheerfully* performed the duties allotted to them.

Allotment System.—In consequence of the success attending the labours of those pupils who obtained allotments for the year 1851, and detailed in my Report for the same year, they applied themselves with increased zeal and industry, to the cultivation of their respective allotments during the past year; and the results are entirely satisfactory, and much beyond my expectations. The following table will show the comparative profits realized on the allotment gardens for the years 1851 and 1852, with an acreable computation for Irish and statute measurement.

Allotment.	Area.	Profit in favour of Cultivator.									Name of Cultivator.
		Year 1851.			Year 1852.			Increase.			
	per.	£	s.	d.	£	s.	d.	£	s.	d.	
A.	12	2	10	11	3	3	8½	0	12	9½	William Walker.
B.	11	2	3	6½	2	15	11½	0	12	5	John Flood.
C.	11	1	10	9	2	16	10½	1	6	1½	* Alexander Campbell.
D.	12	2	4	9	3	4	10½	1	0	1½	* Patrick Flood.
E.	10	2	3	5½	2	5	7	0	2	1½	Hugh Campbell.
F.	10	1	12	8½	2	14	10½	1	2	2	* John M'Dermott.
Total,	66	12	6	1½	17	1	10½	4	15	9	
Average statute acre.	per	29	16	8	41	8	9½	11	12	1½	
Do. Irish Do.		43	6	6	67	2	6	18	16	0	

* There has been a change in the holders of allotments since 1851, viz.:—
In C then held by James Carthy.
In D ,, Fergus Walker.
In F ,, Patrick Flood.

Paid-Monitors.—For the more efficient working of the industrial department two Paid-Monitors were sanctioned and

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Glasnevin Industrial School.

appointed by the Commissioners on the first of last May. These appointments have had the desired effect, and not only served as an inducement to *them*, but also to the other pupils of the class, to attend to their literary studies and industrial pursuits with that zeal and assiduity, which must result in the formation of those skilful, prudent, and industrious habits so useful to them in after-life. In addition to the opportunities afforded them of obtaining a good knowledge of the science and practice of gardening, they have been required to attend the lectures in Agriculture, delivered every morning by Mr. Donaghy, the Superintendent of the Model Farm, to the pupils in training in that institution. Every facility has thus been made available to them of becoming intimately acquainted with the nature of their duties, as literary and industrial Teachers, the primary object the Commissioners had in view, when sanctioning their appointment.

IV. *Miscellaneous.—Piggeries and Sheep-sheds.*—In my last Report will be found the following allusion to this very important subject:—"In order to turn to a profitable account the refuse of the garden, and such vegetables as from time to time have been lost for want of consumption, you have been kind enough to suggest to the Commissioners the necessity of providing sufficient accommodation for four pigs and two sheep; the feeding of the latter being desirable, on the additional ground of affording to the pupils an opportunity of obtaining a knowledge of the proper management of these animals when confined to the house. This arrangement will not only be the source of considerable profit in favour of the industrial department at the close of the year, but will likewise afford an opportunity of inculcating among the pupils habits of industry, forethought, and economy." Owing to certain difficulties this suggestion, though highly approved of, has not been carried into operation. However it is not lost sight of, and I hope to be able in my next Report to place before the Commissioners a favourable account of the experiment.

Forcing.—To create a taste among the pupils for this important branch of gardening, I thought it advisable to grow, on a very limited scale, cucumbers, vegetable marrow, and tomatoes. The results of this experiment, incurring a mere nominal outlay, were so gratifying to myself and instructive to the advanced pupils, as to induce me to procure, in the end of the year, 2 three-light, 1 two-light, and 2 seedling frames, in order to grow more extensively, for the information of the boys, melons, cucumbers, vegetable marrow, gourds, pumpoins, and tomatoes. For the further extension of this department, you will have the kindness to suggest to the Commissioners the propriety of erecting a mushroom shed. The propagation of mushrooms is a process of the greatest importance, whether considered in an educational or pecuniary point of view, and with which all persons professing a knowledge of gardening should be presumed to be *intimately* acquainted.

Annexed I send you the statistics and cropping of the gardens, the "Balance Sheet" of the *entire* industrial department, and the accounts of the "allotment" pupils.

I remain, Sir, your obliged servant,

WALTER HAWE.

To Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector, Model
Farm, Glasnevin, Dublin.

Industrial Department of the Glasnevin School in Account with the Commissioners of National Education.

Dr. *Garden.*

1852.	£	s.	d.
To Amount of Valuation of Stock and Value in Gardens at the commencement of year,	15	9	7
„ Seeds purchased,	2	4	11
„ Manure,	10	0	2
„ New Implements,	1	19	0
„ Repairs of do.	2	3	2
„ Miscellaneous Expenses,	1	14	11
„ Fees paid Pupils of the Industrial Class,	14	12	10
„ Wages paid for extra labour, chiefly employed in the execution of permanent improvements,	22	4	1
„ Cart-hire,	5	9	6
„ Timber and Paint for lattice rail,	4	1	0
„ Gravel for walks, 22 tons, at 2*s.* 6*d.* per ton,	2	15	0
„ Rent and Taxes,	4	9	6
„ Balance in favour of the Industrial Department at the close of year, being £57 4*s.* profit per acre,	63	4	7

Contra. *Cr.*

1852.	£	s.	d.
Jan. 21, By Amount of Receipts during the Month ending this date,	0	12	7
Feb. 29, Do., do., do.,	2	5	6
March 31, Do., do., do.,	1	17	7
April 30, Do., do., do.,	1	14	5
May 31, Do., do., do.,	5	1	0
June 30, Do., do., do.,	2	6	0
July 31, Do., do., do.,	5	2	5
Aug. 31, Do., do., do.,	7	12	11
Sept. 30, Do., do., do.,	4	8	5
Oct. 31, Do., do., do.,	5	3	7
Nov. 30, Do., do., do.,	5	3	7
Dec. 31, Do., do., do.,	3	16	0
„ Vegetables for my own use, 52 weeks, at 1*s.* per week,	2	12	0
Amount,	£47	10	6

Stock and Value in Gardens on this date, viz., Jan. 1st, 1853.

By 66 loads of Manure, at 3*s.* per load,	9	18	0
„ 1,000 Cauliflower plants, at 2*s.* per 100,	1	0	0
„ 3,000 Nonpareil do., at 4*d.* do.,	0	10	0
„ 2,000 Flat Dutch do., at 5*d.* do.,	0	8	4
„ 92 Red Beet roots, at 1*d.* per root,	0	7	8
„ 474 stone Turnips, at 3*d.* per stone,	5	18	6
„ 60 do. Parsnips, at 6*d.* do.,	1	10	0
„ 60 do. Seed Potatoes, at 1*s.* do.,	3	0	0
„ 183 doz. Savoy Cabbage, at 3*d.* per doz.,	2	5	9
„ 596 do. Nonpareil do. at 3*d.* do.,	7	9	0
„ 263 Broccoli,	0	11	0
„ 2 drills of Early Peas, at 5*s.* per drill,	0	10	0
„ 2 do. Beans, at 5*s.* do.	0	10	0
„ 160 Roses, at 1*s.* 6*d.* per plant,	12	0	0
„ 20 doz. of Black and Red Currants in Nursery, at 2*s.* per doz.,	2	0	0
Amount,	£47	18	3

Permanent Improvements to this date, viz., Jan. 1st, 1853.

FRUIT TREES.

„ Espalier and Wall-Fruit Trees, planting of,	4	18	0
„ Manure and maiden earth for do.	2	2	0
„ Freight of do.,	1	6	6
„ Training of do.	3	12	0
„ Gooseberry and Currant Trees,	1	4	0
„ Planting of do.,	0	12	0
„ Manure for do.,	0	6	0
Amount,	£14	0	6

WALKS OF SCHOOL GARDEN.

„ Picking, levelling, and spreading stones, 9 weeks, at 8*s.* per week,	3	12	0
„ Laying and dressing box-edging, 8 weeks, at 12*s.* per week,	4	16	0
„ Box for edging,	1	10	0
„ Broken stones, 42 tons, at 2*s.* per ton,	4	4	0
„ Gravel, 22 tons, at 2*s.* 6*d.* per ton,	2	15	0
„ Spreading, raking, and rolling do.,	1	4	0
„ Pupils' labour, assisting during a period of 8 weeks, at 6*s.* per week,	2	8	0
„ Running the entrance walk in front of School,	1	0	6
Amount,	£21	9	6

MISCELLANEOUS.

„ Lattice rail for Espalier Fruit Trees, cost of,	5	16	0
„ Planting of, and manure for, 160 Roses,	1	16	0
„ Works executed in new garden, lately under Mr. Campbell,	9	18	6
„ New Implements,	1	19	0
Amount,	£19	9	6
Total,	£150	8	3

Total, £150 8 3

WILLIAM WALKER, Pupil of the Industrial Class, in Account with the COMMISSIONERS of NATIONAL EDUCATION.

Dr. *Allotment A* (12 perches).

1852.		£	s.	d.
	To Amount of Valuation at the commencement of year,	1	2	7
March 10,	„ 2 loads of Manure, at 2*s.* 6*d.* per load,	0	5	0
„	„ 150 Flat Dutch Cabbage plants, at 3*d.* per 100,	0	0	4½
„ 14,	„ 1 stone of Seed Potatoes, at 6*d.* per stone,	0	0	6
April 4,	„ 4 oz. Dutch Turnip seed,	0	0	4
May 16,	„ 8 do. Swedish do.,	0	0	4
July 9,	„ 350 Nonpareil plants, at 3*d.* per 100,	0	0	10½
Oct. 4,	„ 350 Do., do.,	0	0	10½
Dec. 31,	„ Rent of 12 statute perches, at £5 per Irish acre,	0	4	7½
„	„ Balance as profit in favour of Allotment at the close of year, being at the rate of £42 10*s.* per statute acre,	3	3	8½
	Total,	£4	19	2½

Contra. *Cr.*

1852.		£	s.	d.
Jan. 12,	By Nonpareil Cabbage,	0	1	7
„	„ 11 stone Turnips, at 4*d.* per stone,	0	3	8
„ 24,	„ Cabbage,	0	0	7
„	„ 12 stone Turnips, at 4*d.* per stone,	0	4	0
„ 31,	„ 11 Do: do.,	0	3	8
„	„ 1½ doz. Cabbage, at 6*d.* per doz.,	0	0	9
Feb. 7,	„ 1¾ Do., do.,	0	0	10½
„ 21,	„ 5 Do., do.,	0	2	6
„ 28,	„ 1½ Do., do.,	0	0	9
„	„ 11 stone Turnips, at 4*d.* per stone,	0	3	8
March 10,	„ Cabbage,	0	0	2
„ 11,	„ Do.,	0	0	3
„ 15,	„ Do.,	0	0	2
„	„ Do., 11 doz., at 6*d.* per doz.,	0	5	6
„ 20,	„ Sprouts,	0	0	6
„ 30,	„ Cabbage, 4 doz., at 4*d.* per doz.,	0	1	4
Aug. 21,	„ 50 bunches of Dutch Turnips, at 3*d.* per bunch,	0	12	6
„ 28,	„ 10 Do., do.,	0	2	6
„	„ 14 doz. Flat Dutch Cabbage, at 9*d.* per doz.,	0	10	6
„	„ 27 stone Potatoes, at 6*d.* per stone,	0	13	6
Sept. 8,	„ Fruit,	0	0	7

Stock and Value in Allotment, Jan 1st, 1853.

By 30 doz. Nonpareil Cabbage, at 3*d.* per doz.,		0	7	6
„ 33 Do. do., at 2*d.* do.,		0	5	6
„ 50 stone Turnips, at 4*d.* per stone,		0	16	8
	Total,	£4	19	2½

JOHN FLOOD, Pupil of the Industrial Class, in Account with the COMMISSIONERS of NATIONAL EDUCATION.

Dr. *Allotment B* (11 perches).

1852.		£	s.	d.
	To Amount of Valuation at the commencement of year,	0	13	6
March 10,	„ 150 Flat Dutch plants, at 3*d.* per 100,	0	0	4½
„	„ 2 loads Manure, at 2*s.* 6*d.* per load,	0	5	0
„	„ 1 stone Seed Potatoes, at 6*d.* per stone,	0	0	6
April 14,	„ 4 oz. Dutch Turnip seed,	0	0	4
May 16,	„ 8 do. Swedish do.,	0	0	4
June 20,	„ 300 Nonpareil plants, at 3*d.* per 100,	0	0	9
Sept. 4,	„ 300 Do., do.,	0	0	9
Dec. 31,	„ Rent of 11 statute perches, at £5 per Irish acre,	0	4	3
„	„ Balance as profit in favour of the Allotment at the close of the year, being £40 13*s.* 11*d.* per statute acre,	2	15	11½
	Total,	£4	1	9

Contra. *Cr.*

1852.		£	s.	d.
March 10,	By 37 doz. Nonpareil Cabbage, at 6*d.* per doz.	0	18	6
July 12,	„ 1 bunch Turnips,	0	0	4
Aug. 14,	„ 56 Do., do., at 3*d.* per bunch,	0	14	0
„	„ 24¾ stone Potatoes, at 6*d.* per stone,	0	12	4½
„ 21,	„ 13½ doz. Flat Dutch Cabbage, at 9*d.* per doz.,	0	10	1½
	Stock and Value in the Allotment, Jan. 1st, 1852.			
	By 25 doz. Nonpareil Cabbage, at 3*d.* per do.,	0	6	3
	„ 25 Do., do. at 2*d.* do.,	0	4	2
	„ 48 stone Turnips, at 4*d.* per stone,	0	16	0
	Total,	£4	1	9

Glasnevin Industrial School.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Alexander Campbell, Pupil of the Industrial Class, in Account with the Commissioners of National Education.

Dr. — *Allotment C* (11 perches).

1852.		£	s.	d.
	To Amount of Valuation at the commencement of year,	0	12	3
March 10,	„ 150 Flat Dutch Cabbage, at 3*d.* per 100,	0	0	4½
„	„ 2 loads Manure, at 2*s.* 6*d.* per load,	0	5	0
April 4,	„ 4 oz. Dutch Turnip seed, at 1*d.* per oz.,	0	0	4
May 16,	„ 8 do. Swedish do., at ½*d.* do.,	0	0	4
June 23,	„ 300 Nonpareil Cabbage plants, at 3*d.* per 100,	0	0	9
Sept. 8,	„ 300 Do., do., do.,	0	0	9
Dec. 31,	„ Rent of 11 statute perches, at £5 per Irish acre,	0	4	3
„	„ Balance as profit in favour of Allotment at the close of year, being £41 9*s.* 8*d.* per statute acre,	2	16	10½
	Total,	£4	0	11

Contra. — *Cr.*

1852.		£	s.	d.
March 28,	By 18¾ doz. Nonpareil Cabbage, at 6*d.* per doz.,	0	9	4½
„	„ 3 stone Seed Potatoes, at 6*d.* per stone,	0	1	6
„ 29,	„ Sprouts,	0	0	7
April 27,	„ 17 doz. Nonpareil Cabbage, at 4*d.* per doz.,	0	5	8
Sept. 4,	„ 64 bunches of Dutch Turnips, at 3*d.* per bunch,	0	16	0
„	„ 7 doz. Flat Dutch Cabbage, at 9*d.* per doz.,	0	5	3
„ 11,	„ 6½ Do., do., do.,	0	4	10½
„	„ 20 stone Potatoes, at 6*d.* per stone,	0	10	0
„ 14,	„ 3½ Do., do.,	0	1	9
	Stock and Value in the Allotment, Jan. 1st, 1853.			
	By 25 doz. Nonpareil, at 3*d.* per doz.,	0	6	3
	„ 25 Do., at 2*d.* do.,	0	4	2
	„ 46½ stone Turnips, at 4*d.* per stone,	0	15	6
	Total,	£4	0	11

Patrick Flood, Pupil of the Industrial Class, in Account with the Commissioners of National Education.

Dr. — *Allotment D* (12 perches).

1852.		£	s.	d.
	To Amount of Valuation at the commencement of year,	0	14	7
March 10,	„ 150 Flat Dutch plants, at 3*d.* per 100,	0	0	4½
„	„ 1 stone seed Potatoes, at 6*d.* per stone,	0	0	6
„	„ 2 loads Manure, at 2*s.* 6*d.* per load,	0	5	0
April 14,	„ 4 oz. Dutch Turnip seed,	0	0	4
May 15,	„ 8 do. Swedish do.,	0	0	4
June 12,	„ 350 Nonpareil plants, at 3*d.* per 100,	0	0	10½
Sept. 24,	„ 350 Do., do.,	0	0	10½
Dec. 31,	„ Rent of 12 statute perches, at £5 per Irish acre,	0	4	7½
„	„ Balance as profit in favour of Allotment at the close of year, being £43 5*s.* per statute acre,	3	4	10½
	Total,	£4	12	4½

Contra. — *Cr.*

1852.		£	s.	d.
March 22,	By 23½ doz. of Nonpareil Cabbage, at 6*d.* per doz.	0	11	8
April 30,	„ 36½ Do., do., at 4*d.* do.,	0	12	2
Sept. 24,	„ 40 bunches of Turnips, at 3*d.* per bunch,	0	10	0
„	„ 7 doz. Flat Dutch Cabbage, at 9*d.* per doz.,	0	5	3
„ 28,	„ 22 bunches of Turnips, at 3*d.* per bunch,	0	5	6
„	„ 26 stone Potatoes, at 6*d.* per stone,	0	13	0
„	„ 7½ doz. Flat Dutch Cabbage, at 9*d.* per doz.,	0	5	7½
	Stock and Value in the Allotment, Jan. 1st, 1853.			
	By 30 doz. Nonpareil Cabbage, at 3*d.* per doz.,	0	7	6
	„ 30 Do., at 2*d.* do.,	0	5	0
	„ 50 stone Turnips, at 4*d.* per stone,	0	16	8
	Total,	£4	12	4½

Hugh Campbell, Pupil of the Industrial Class, in Account with the Commissioners of National Education.

Dr. — *Allotment E* (10 perches).

1852.		£	s.	d.
	To Amount of Valuation at the commencement of year,	0	17	8
March 10,	„ 250 Flat Dutch plants, at 3*d.* per 100,	0	0	7½
„	„ 2 loads Manure, at 2*s.* 6*d.* per load,	0	5	0
April 14,	„ 4 oz. Dutch Turnips, at 1*d.* per oz.,	0	0	4
May 17,	„ 8 do. Swedish do.,	0	0	4
Sept. 18,	„ 650 Nonpareil plants, at 2*d.* per 100,	0	1	7½
Dec. 31,	„ Rent of 10 statute perches, at £5 per Irish acre,	0	3	10
„	„ Balance as profit in favour of Allotment at the close of year, being £36 9*s.* 4*d.* per statute acre,	2	5	7
	Total,	£3	15	0

Contra. — *Cr.*

1852.		£	s.	d.
Jan. 10,	By 2 stone Turnips, at 4*d.* per stone,	0	0	8
March 27,	„ 37 doz. Cabbage sold to this date, at 4*d.* per doz.	0	12	4
May 14,	„ 9¾ Do., do. do.,	0	3	3
Sept. 18,	„ 30 bunches Turnips, at 3*d.* per bunch,	0	7	6
„	„ 7 doz. Flat Dutch, at 9*d.* per doz.,	0	5	3
„	„ 20 stone Potatoes, at 6*d.* per stone,	0	10	0
„ 20,	„ 2½ Do., do.,	0	1	3
„ 25,	„ 30 bunches Turnips, at 3*d.* per bunch,	0	7	6
„	„ 7 doz. Flat Dutch, at 9*d.* per doz.,	0	5	3
Oct. 2,	„ 15 bunches of Turnips, at 3*d.* per bunch,	0	3	9
„	„ 7 doz. Flat Dutch, at 9*d.* per doz.,	0	5	3
	Stock and Value in the Allotment, Jan. 1, 1852.			
	By 30 doz. Nonpareil Cabbage, at 3*d.* per doz.,	0	7	6
	„ 33 do. Do. at 2*d.* do.,	0	5	6
	Total,	£3	15	0

JOHN M'DERMOTT, Pupil of the Industrial Class, in Account with the COMMISSIONERS OF NATIONAL EDUCATION.

Dr. *Allotment F* (10 perches).

1852.		£	s.	d.
	To Amount of Valuation at the commencement of year,	0	12	6
March 9,	„ 2 loads of Manure, at 2*s.* 6*d.* per load,	0	5	0
April 10,	„ 5 oz. Dutch Turnip,	0	0	5
May 16,	„ 8 do. Swedish do.,	0	0	4
July 14,	„ 300 Nonpareil plants, at 3*d.* per 100,	0	0	9
Sept. 19,	„ 350 Do., do.,	0	0	10½
Dec. 31,	„ Rent of 10 statute perches, at £5 per Irish acre,	0	3	10
„	„ Balance as profit in favour of Allotment at the close of year, being £43 18*s.* per statute acre,	2	14	10½
	Total,	£3	18	7

Contra. *Cr.*

1852.		£	s.	d.
Jan. 24,	By 8⅓ doz. Nonpareil Cabbage, at 6*d.* per doz.,	0	4	2
Feb. 29,	„ 10 Do., do.,	0	5	0
March 15,	„ 6 Do., do.,	0	3	0
„ 24,	„ 2 heads Do., do.,	0	0	1
April 3,	„ 18 doz. Do., at 4*d.* do.,	0	6	0
July 15,	„ Apples,	0	0	4
Sept. 2,	„ 15 bunches Turnips, at 3*d.* per bunch,	0	3	9
„	„ 20 stone Potatoes, at 6*d.* per stone,	0	10	0
„ 4,	„ 2 Do., do.,	0	1	0
„ 9,	„ 30 bunches Turnips, at 3*d.* per bunch,	0	7	6
„ 16,	„ 30 Do., do.,	0	7	6
Dec. 11,	„ 28 stone Turnips, at 4*d.* per stone,	0	9	4
„ 18,	„ 29 Do.. do.,	0	9	8
	Stock and Value in the Allotment, Jan. 1, 1853.			
	By 25 doz. Nonpareil Cabbage, at 3*d.* per doz.,	0	6	3
	„ 30 Do., do., at 2*d.* do.,	0	5	0
	Total,	£3	18	7

5. Bailieborough District Model Agricultural National School, County Cavan.

January, 1853.

Sir,—I beg leave to lay before you my Third Report (for the year 1852) on the Agricultural department of the above institution. The operations of draining and trenching, performed on a large extent of ground, together with removing stones and fences, filling gripes and levelling banks, have incurred a larger outlay, and raised the labour account higher than I had anticipated. But it is, however, much lower than what it was in 1851; and I expect that it will be still lower for the ensuing year, as most of the heavy work has been completed. From the state in which this farm was at the commencement, it was heretofore found necessary to give extra labour to the crops; but as the land is getting into better and cleaner condition, this extra work is gradually lessening, and must finally disappear in the course of a short time. This farm, which was rugged, stiff, cold, and wet two or three years ago, is now assuming a sightly and healthy appearance. It has been nearly all manured, and, with the exception of the paddock, the whole has been deeply dug with the spade, the most of it trenched, the old scutch-grass rooted up and burned, and replaced by the more beneficial rye grasses.

The loss on last year's transactions is a good deal less than on those of the previous year; and I confidently anticipate that in a short time hence this will disappear altogether, and give place to a profitable result.

Cropping.—The farm is cropped on the four and five course shifts. In the four-course shift, the field intended for the green fallow crops, turnips, mangel, carrots, and potatoes, was, during the winter, trenched two spadings deep, and all the stones to that depth were raised and carted off to a large gripe, running along the boundary fence, for the purpose of having it filled. The trenching was performed across the hill, and the spadings thrown upwards, by which means the whole soil was removed two feet farther up the hill. The drilling was done with the shovel, and the manure put out in wooden panniers on asses' backs. The turnips and carrots were excellent; but the potatoes and mangel were indifferent, three-fourths of the former being rotten. The manure applied to these crops was the general manure of the yard, being a mixture of horse, cow, and pig dung, with some bog-stuff. In addition to this manure, the turnips, mangel, and carrots, got some guano, peat charcoal, and ashes. The following method is the one I adopt in sowing turnips and other small seeds in drills:—The farm-yard manure being covered in the usual manner in the drills, a rut is made in the top of the drill along its whole length, or holes are dibbled at the desired distance apart; into these holes, or into the ruts, the guano, which is mixed with twice its own bulk of ashes (obtained by burning

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Bailieborough Model Farm.

weeds, such as scutch-grass, &c.), is sown; it is then carefully covered with fine mould, over which the seeds are placed, and covered with ashes; clapping with a shovel, or rolling with a roller, finishes the operations. This is an expensive method of sowing turnips; but I do think the crop will amply repay for the extra trouble incurred in getting in the seed. I find that ashes (and a small quantity will do an acre), answer best for covering small seeds, particularly in newly trenched ground, or where the land is heavy, as there is no danger of a crust being formed that can prevent the upward growth of the young plants. I substituted peat charcoal in a few drills for guano—the turnips were not so good a crop as where the latter substance was used. The other crops in this shift were cultivated and harvested as usual.

In the five course shift the green crop field was cultivated by the plough and drill grubber; the crop was a good average one.

Cattle.—The live stock cattle consists of 3 milch cows, 2 heifers, 1 bull, 1 jennet, 1 calf, and 2 pigs. The cows are regularly "house-fed," but they get out daily, for a few hours, to the paddock or grass field. There was no disease during the year.

"*Agricultural Class.*"—This class comprises the advanced boys in the Literary School, and numbers 28 at present. The members of it are principally the sons of farmers and labourers—such as should take an interest in agricultural subjects, and on whom the charge of farms and farming pursuits will ultimately devolve. Some of them are the sons of traders in the town, who also hold farms. I am happy in being able to state, that during the year the boys of this class conducted themselves with great propriety, and have evinced a laudable desire for improvement. They are instructed half an hour daily, and the course of instruction continues the same as described in my last Report. The parents of the pupils are most anxious that their agricultural education may be as extensive as possible; and hence the prejudice which existed, some years back, against the combined literary and agricultural instruction has almost entirely disappeared from amongst those classes most likely to be influenced by the training of the youth of the country in such a system.

The Head Inspector, Dr. Patten, and the District Inspector, E. A. Conwell, Esq., at the last annual public examinations, testified their approbation of industrial training, and their desire to encourage it among the pupils, by allotting, out of the £5 at their disposal for distributing as premiums to the most deserving pupils, the sum of £2 2*s.* 6*d.* for those of the agricultural department. It was distributed in eight premiums, varying in amount from 4*s.* 6*d.* to 6*s.* 6*d.* each.

The "Pupil-Teachers," "Agricultural Boarders," and the pupils of the "Industrial" and "Agricultural" classes, were examined together at the general examination, and answered,

much to the satisfaction of those present (their parents and relations), the questions proposed on each of the following subjects:—

Geology.—Classification of rocks—where they severally appear in the different counties in Ireland—how soils are formed from them—nature and capabilities of soils, and the several practical operations resorted to in the working and improvement of them.

Chemistry.—Division of the elementary bodies—properties of the inorganic constituents of plants, potash, soda, lime, magnesia, sulphuric and phosphoric acids, &c.—formation of earths, oxides, alkalies, acids, and salts—composition and properties of water and atmospheric air, and their influence on animal and vegetable life.

Vegetable Physiology.—How plants are produced—parts of a plant, and the functions performed by each in its growth and perfect development—sources from which plants derive their food, and the nature of this food—composition of the organic compounds, starch, sugar, woody fibre, gum, gluten, vegetable albumen, and vegetable casein.

Rotations.—The three, four, five, and six courses, and the soils to which they are respectively adapted.

Manures.—Collecting and preserving the different kinds of manures which a farm produces.

"*Industrial Class.*"—This class numbers six, and continues to work satisfactorily. They are engaged on the farm for two hours on each day of the week, except on Saturday, when they work three hours. They assist at the different farm operations, such as hoeing, digging, sowing seeds, cleaning yards, currying and feeding cattle, &c. They are thus gradually initiated into the proper methods of doing these things, and many of them become expert and skilful workers. I calculate little on the *intrinsic* value of the work they are capable of performing—the *real* value of their labour does not rest in that. I consider an "Industrial Class," when properly organized and instructed, to be the right arm of an Agricultural Educational Institution. The stimulant of a free scholarship, open to it yearly, causes a keen rivalry among its members; while a *library* (small as yet, but steadily increasing), purchased from a portion of its own funds, being the amount accumulated from fines, &c., in accordance with the *rules* for the management of such classes, affords them excellent facilities for improvement.

Agricultural Pupil-Boarders.—Four young men were in training in this class during the year, all of whom gave me entire satisfaction. These young men take part in all the farm work, and act as monitors and trainers to the boys of the "Industrial" and "Pupil-Teachers'" classes. They receive one and a-half hour's instruction from me daily, and have the use of a library of select agricultural works.

"*Pupil-Teachers' Class.*"—This comprises four young men, promoted from ordinary National Schools, where they have

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Bailieborough Model Farm.

acted as Monitors or Assistant-Teachers. They are retained here for one year, and work two hours daily on the farm. During the year four of them have been sent out to act as principal Teachers of National Schools. The children in their several schools must surely receive considerable improvement from the knowledge which these Teachers acquired while here. I am enabled to speak highly of the conduct of the young men of this class.

Hoping this Report may be found satisfactory,

I am, Sir, your obedient servant,

JOHN STEWART, Agriculturist.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector,
Education Office, Dublin.

TABLE showing the Number of Pupils receiving Agricultural Instruction in the several Classes.

For the Quarters ending	Agricultural Pupil-Boarders.	Pupil-Teachers.	Industrial Class.	Agricultural Class.	Total.
March 31, . .	4	4	6	27	41
June 30, . .	4	4	6	26	40
September 30, .	4	4	6	27	41
December 31, .	4	4	6	28	42

SUMMARY of the Year, and BALANCE SHEET.

Dr.	£	*s.*	*d.*
To Amount of Valuation at commencement of year,	161	11	5
,, Rent and Rates,	31	4	6
,, Manure, Lime, Seeds, Feeding Stuff for Cattle, &c.,	25	2	4
,, Paid for Cattle,	1	19	6
,, Paid for Labour,	53	5	9
,, Estimated Value of Pupils' Labour,	5	0	0
,, Paid for Implements, and Repairs, and Miscellaneous Articles,	3	9	7
	£281	13	1

Cr.	£	*s.*	*d.*
By Amount received for Grain,	11	19	6
,, for Root Crops,	0	19	2
,, for Cattle,	13	14	0
,, for Dairy Produce,	21	3	9
By Amount of Valuation at close of year, together with proportion of Permanent and Unexhausted Improvements,	204	19	0
,, Loss on year's transactions,	28	17	8
	£281	13	1

TABLE showing the CROPPING of the Bailieborough District Model National School Farm, for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Lose per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Turnips,	1 3 24	May and June,	December,	8 lbs.,	24 tns. roots, 6 lbs. tops,	9 9 2	3 8 10*p.*	
Mangel,	0 0 8	April,	November,	6 lbs.,	6 tons,	9 9 2	2 5 2*l.*	
Carrots,	0 1 4	April,	November,	6 lbs.,	10 tons,	10 0 0	5 0 0*p.*	
Potatoes,	0 1 10	Feb. and March,	November,	8½ cwts.,	30 cwts.,	9 0 0	4 0 0*l.*	
Flax,	0 3 9	April,	August,	9 pecks,	£8 15*s.* 7*d.*, estimated val.	6 10 3	2 3 4*p.*	
Oats,	3 1 36	March,	September,	7½ stones,	8 brls. 8 st.,	4 0 0	0 5 8*p.*	
Vetches,	0 3 0	April,	August and Sept.,	2½ bushels,	12 tons,	3 18 0	1 10 0*l.*	
Garden Crops,	0 1 0	Jan., Feb., March,	—	—	—	10 2 8	0 13 8*p.*	
Grass for hay soiling,	4 0 4	April, 1851,	June, &c.,	2 bshls. mixed	36 cwts.	2 17 8	0 14 4*p.*	

(Signed,) JOHN STEWART, Teacher.

I certify that the above returns are correct, according to the best of my knowledge and belief,

January, 1853. EUGENE A. CONWELL, Inspector.

Dunmanway Model Farm.

6. DUNMANWAY DISTRICT MODEL AGRICULTURAL SCHOOL, County Cork.

January, 1853.

SIR,—In submitting to you the following Report on the Dunmanway Model Farm, I beg to state, that in consequence of the principal operations of the farm having been completed by my predecessor, Mr. Connor, previous to my entry upon it in July last, nothing of any consequence rests with me to describe. The course of cropping pursued, and the general working of the institution are in every way the same as detailed in his Report for 1851.

The quantity of winter beans you forwarded me to grow on the Model Farm as a trial, and which I sowed about the middle of November, are now above ground, and promise well. This is a crop that the farmers pay very little attention to in this part of the country, though the soil in general is favourable to its growth, resting, as it does, on the clay-slate formation; and I have every reason to believe that its more extended cultivation would prove a source of great remuneration. A great many of the farmers here are anxiously awaiting the result of the experiment now instituted on the Model Farm.

It will be seen, by a reference to the "Balance Sheet," that the year's transactions have been attended with a considerable loss. To those, however, that are in any way connected with the working of the establishment, or who are aware of the many unfavourable local circumstances under which it labours, this will not appear in the least surprising; but there are many who, judging by this criterion alone, will unhesitatingly pronounce the system a failure. To such, therefore, with the view of removing this erroneous impression, I beg most respectfully to submit the following considerations, which must be taken into account in order to form a just estimate of the success or failure attendant upon our labours.

Among the various circumstances which regulate the value of land, there is one which deserves particular notice—its proximity to markets. Farms that are so situated are generally subject to a high rent; that in our case being £3 per statute acre. We find, therefore, that those who are engaged in agricultural pursuits in such localities pursue a system of management adapted to the circumstances in which they are placed. Regular rotations are hardly ever followed out—a sufficient stock of cattle is seldom or never kept to consume the produce of the farm—attention being principally directed to the cultivation of those crops which afford a ready sale in the market, viz., turnips, cabbages, &c.

If a profitable pecuniary result were the chief object of our labours, it is true it might readily be accomplished, by following a system somewhat similar to that detailed, but as the great object in view is to afford our pupils an opportunity of

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Dunmanway Model Farm.

acquiring a *general knowledge of agriculture*, and to exhibit to them such a course of systematic cultivation and general farm management as will fit them for successfully practising their profession *in any locality*, we consider it more advisable to adhere to this course, even at a pecuniary disadvantage, than to follow one which would not be efficient as *a means of instruction*, though it might be attended with favourable pecuniary results. This assertion I do not advance without due consideration, as I think I shall be borne out in the truth of it by the following statements :—

A reference to the statistics of cropping accompanying this report will show that, according to the rotations followed, we had 4a. 1r. 12p. of ground under grain, attended with a loss of 11*s.* 6*d.* per statute acre. Now if a crop of turnips had been substituted in lieu of the grain, and the produce disposed of in market (which could be readily effected) the result, as I shall presently show, would have been very favourable so far as the monetary transaction is concerned.

The expense attending the cultivation of an acre of turnips, as taken from the year's return, is £7 10*s.* ; the produce, as seen from the same, 25 tons. Now the selling price of sound turnips in this locality is 16*s.* 8*d.* per ton ; at this rate there is always a ready demand in the market, from the fact that the poorer classes live almost exclusively on this vegetable throughout the winter months ; and also the country being very mountainous, green crop culture cannot be properly attended to. In order, however, to be within the mark, we shall only allow 15*s.* per ton. An acre, therefore (25 tons), would produce £18 15*s.*, from which deduct expense of cultivation, £7 10*s.*, and we shall have a clear gain of £11 5*s.* per statute acre, or on 4a. 1r. 12p., £48 13*s.* 1*d.* To arrive, then, at a correct result in the way of a money profit, regarding the parts, as set forth, of the two systems, it will be necessary to take into account the loss that the area of ground under oats entails, this, as already noticed, being 11*s.* 6*d.* per acre, will amount, in the aggregate, to £2 9*s.* 8*d.*, which, when added to the last-mentioned sum (£48 13*s.* 1*d.*), will leave a difference of £51 2*s.* 9*d.* in favour of the system of growing crops for the market.

Besides the causes already adverted to, depreciation in the value of live stock has tended to produce the unfavourable result shown by the Balance Sheet.

Agricultural Instruction.—This subject has been brought before your notice in Mr. Connor's report for last year. The hours allotted for giving instruction to the several classes continue the same as in last report ; the different subjects treated of embracing the defects of Irish farming, and their remedies ; the cultivation of the different crops ; the different rotations of cropping as applicable to the various descriptions of soil, are also, in a great measure, similar. The scientific portion of the course comprises geology, vegetable physiology, and elementary chemistry in its relation to agriculture.

In my course of instruction I found the subject of chemistry, when not illustrated by experiment, dry and uninteresting in its details, and not well calculated to fix the serious attention of the class, no definite ideas remaining on the minds of the pupils as to the properties of the different gases, acids, salts, &c., of which I spoke. I thought, therefore, that a small collection of chemicals, including a few of the simple bodies, acids, salts, and alkalies, would render the prosecution of the study more pleasant and successful. With this impression I expended the sum of £6 in the purchase of a small chemical apparatus, and the results, I am now happy to state, have fully equalled my expectations.

I have prepared, in the presence of the class, all the ordinary gases, ammonia, a few acids, and numerous salts, &c.; made them familiar with the beautifully simple nomenclature of chemistry so far that they can show on the black board, by means of chemical symbols, the changes produced in many cases of single and double decomposition. I explained the action of alteratives and manures; exemplified, by experiments, simple cases of qualitative analysis, such as finding the amount of water, organic matter, and ash in some of the root crops, and the most common substances found in this ash and in the soil; showed them the different tests by which the several substances are detected, &c. The pupils have been delighted with these experiments, and the otherwise abstract ideas of chemistry are thus rendered appreciable. A step in the right direction has been taken, and I trust I will be able, at a future time, to report favourably of its progress.

I remain, Sir, your obedient servant,

JAS. W. SMYTH.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector to the
Commissioners of National
Education.

Dr. SUMMARY of the Year and BALANCE SHEET. *Cr.*

	£	s.	d.		£	s.	d.
To Amount of Valuation at commencement of year, .	128	17	10	By Amount of Valuation taken at close of year, . .	118	3	1*
,, ,, paid for Manure, Seed, &c., . . .	10	11	4	,, ,, of Dairy Produce, ...	19	11	10
,, ,, ,, for Implements and Repairs, . .	3	7	7	,, ,, of Potatoes, Roots, &c., ...	11	7	7½
,, ,, ,, for Labour, including services of Dairy Maid, ...	23	6	4	,, ,, of Grain, ...	6	15	8
,, ,, ,, for Rent and Taxes, ...	34	2	11	,, ,, of Cattle sold, ...	18	2	0
,, ,, ,, for Cattle, ...	21	1	6	,, ,, of Eggs and Poultry, ...	1	4	3⅓
,, ,, ,, for Miscellaneous Expenses, including Fuel, Bran, &c., ...	7	2	6	,, ,, of Sundries, ...	1	6	9½
				,, ,, of Outstanding Debts, ...	1	0	0
				,, ,, of Proportion of Unexhausted Improvements, ...	11	19	5
				,, ,, Loss, ...	38	19	3½
	£228	10	0		£228	10	0

* I certify that I believe the above amount to be the fair and accurate value of the crops and other items on the Model Farm premises, Dunmanway, as estimated by Mr. Regan and myself.

J. HAMILTON, Brookpark, Dunmanway.

Dec. 21, 1852.

TABLE showing the CROPPING of the Dunmanway District Model National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Oats,	4 1 12	March,	12th August,	8 stones,	6 barrels,	3 10 6	0 11 6*l.*	The straw is not taken into account, neither is the labour attending the reaping, threshing, &c., as the former generally goes to defray the expense of the latter.
Potatoes,	0 3 0	November,	August,	10 cwts.,	3½ tons,	7 10 0	0 10 0*l.*	
Flax,	0 1 2	April,	July,	3 bushels,	Not yet ascertained	—	—	
Carrots,	0 0 30	April,	November,	5 lbs.,	12 tons,	7 0 0	2 0 0*p.*	
Mangels,	0 1 10	May,	November,	5 lbs.,	12 tons,	6 17 6	0 17 6*p.*	The green crops, turnips, mangels, &c. &c., are estimated according to what they realise when used on the premises for feeding purposes and making manure.
Turnips, Swedes,	1 2 16	June,	November,	3½ lbs.,	25 tons,	7 10 0	4 0 0*p.*	
,, Globes,	0 3 0	June,	October,	4 lbs.,	18 tons,	7 10 0	2 2 0*l.*	
Cabbages,	0 0 20	Oct. and March,	May to July,	7,000,	12 tons,	9 0 0	1 10 0*l.*	
Vetches,	0 2 26	May,	July,	3 bushels,	5 tons,	4 10 0	0 10 0*l.*	
Grass,	2 2 11	—	—	—	—	—	—	Having no data as to the correct returns of this and a few other crops, I cannot, therefore, draw accurate conclusions.
Stolen Crops:								
Vetches, Winter,	0 3 7	October,	May to June,	—	—	—	—	
Turnips,	0 2 0	—	—	—	—	—	—	
Rape,	1 0 0	—	—	—	—	—	—	

(Signed,) JAMES W. SMYTH, Teacher.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Dunmanway Model Farm.

APPENDIX K. II. Appendix to Dr. Kirkpatrick's Report.

7. ATHY DISTRICT MODEL AGRICULTURAL SCHOOL, Co. Kildare.

Athy Model Farm.

January, 1853.

SIR,—The Athy District Model Farm, on which operations were commenced in February last, consists of 19A. 2R. 31P., statute measure. The want of a late autumn or winter preparation of the ground was most severely felt throughout the whole season, in the increased expense of tillage necessary for the thorough pulverization of the soil and perfect eradication of weeds, and in the subsequent unhealthy state of almost all our green crops. As there was no manure on the farm at my entry, the amount which had to be purchased was very great, and was mostly of a bad description, the management of this important article being very much neglected in this neighbourhood. The pressure of work consequent on entering upon a new farm, delay in procuring many of the necessary implements and other requisites, and in the selection of suitable plans, have all told considerably on the returns of the year. Yet, withal, we had nothing that could be really called a bad crop, except a small patch of potatoes, a few drills of carrots, and a rood of flax.

Provision has been made for the establishment of a regular rotation on the portion of the farm under crop this season; and as the details of cropping adopted this year were not in accordance with a regular system, it is not intended to offer any comments on such till all is properly organized. Some trials of manures and crops of different kinds were instituted, in order to arrive at correct conclusions as the ground-work of a rotation; but, from several matters which interfered with their being accurately conducted, it is deemed advisable to withhold them; we intend, however, to follow them out with perfect accuracy, and we hope to be able to communicate satisfactory results in our next Report.

"*Industrial Class.*"—Eight of the most eligible Pupils of the Male School were selected for this class in September last, and since the 1st October they have been working regularly and efficiently on the Model Farm, for the usual time each day. Some of the boys first appointed have since resigned, but their places have been supplied by others, and the class now numbers ten regular attenders. This class, as in all Agricultural Schools, is instructed in the rudiments of farming, in conjunction with the *Agricultural Class* (which I shall presently notice) in the school-room, for half an hour on each of four days in the week, and attend for practical instruction for two hours every day of the week, except Saturday, when they attend three, and take part in all the operations that are going forward on the farm at that time, which they do most willingly; and, to a person unaccustomed to see boys at work, it is almost incredible the *quality* of the work they can perform. It is in contemplation, through your kind suggestion, to lay out a few plots of ground for the best and most attentive boys of this class to cultivate *on their own ac-*

count, the profits of which, after payment of rent and all other expenses attending the cultivation, shall become their property. This, it is hoped, will prove a powerful inducement to increased exertion and success in this department.

The "Agricultural Class" comprises about *twenty* of the advanced boys of the Literary School, who receive agricultural instruction for half an hour on Tuesdays, Wednesdays, Thursdays, and Fridays; but as the class was not formed till the 23rd November, the progress has not been very great.

"*Agricultural Boarders' Class.*"—The members of this class board and lodge in the establishment; they are thus under the special care of both Literary and Agricultural Teachers, and a constant vigilance is exercised over their conduct. From they rise in the morning till they retire to rest after the toils of the day, they are taught to perform their duties in the most punctual and orderly manner—trained to habits of industry, forethought, and economy. To *plan*, *arrange*, and *systematise* is thus made a *leading principle* in their education. The members of this class are engaged working on the farm for six hours daily the first five days of the week, and four and a-half hours on Saturdays. They, as also the Pupil-Teachers, receive instructions for an hour each evening in the week, except Saturdays, on practical and scientific farming. Their progress for the time has been most satisfactory, and their conduct, in every respect, praiseworthy. Although the Pupil-Teachers do not join in the operations of the farm, still they have acquired a very fair knowledge of the theory of agriculture; but their not taking an *active* part in the operations of the farm is very much to be regretted.

There was no difficulty experienced in finding Pupils to enter as members of the different Agricultural Classes. Professional men, as well as farmers, have been roused to a sense of the importance of securing such an education for their sons as an establishment of this kind can impart. In the "Industrial Class" we have the sons of some highly-respectable families; and although they are required to perform even the most disagreeable operations of the farm, they never murmur. One of our Agricultural Boarders is the son of a professional gentleman of high standing, and he evinces no more reluctance to perform his appointed work, whatever it may be, than the humblest pupil of the school. These boys understand right well that, to know how to *direct*, they must first learn how to *perform*.

It is surprising to find how soon the Pupils become sensible of the imperfections of the system of farming pursued in the neighbourhood, and the numerous and searching questions they ask in reference to the improvements that are taking place. Every thing different from what we practise or have taught is eagerly criticised and discussed, and if not settled among themselves, is referred to me for judgment. These observations, inquiries, and investigations are encouraged as much as possible, as in this way they will discover the short-

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Athy Model Farm.

comings of the prevailing system, and more fully appreciate the advantages of the improved which we are endeavouring to propagate.

Live Stock.—As soon as the farm-yard buildings were completed, and food grown for stock, we purchased a young cow, newly calved, and, as our feeding increased, we augmented our stock to four. These cows were bought at prices varying from £10 10*s.* to £13, stock being very high in this locality, but of a very good description. The sale of dairy produce for the last month shows a return of upwards of 6*s.* a-head per week, though two-thirds of the quantity sold rates at only 6*d.* per gallon, and the same proportion of butter at 8*d.* per lb. The cattle receive *three* feeds of raw turnips, of about 20 lbs. each feed, and *two* feeds boiled turnips, cut hay or straw, and a small quantity of bruised oats, all made up into a mash, in a trough with a close lid. Salt is applied when mixed, and, when properly cooled, each cow is served with a bushel at each feed. A handful of hay is given immediately after each feed; and all refuse matter is carefully collected and cooked in the mash, thereby allowing nothing to go to waste. The pigs are fed three times a-day, with equal quantities of boiled mangel and turnips, mixed with stirabout, made of the water left after boiling the mangel and turnips, and bruised oats. A little buttermilk is sometimes given in conjunction with the above.

If we are to judge of the interest taken in this establishment, more especially the agricultural department, by the number of visitors, we may fairly assume that it is very great. Many of the neighbouring farmers, and not a few from a distance, attended during the sowing of our green crops, and were well pleased with the plans adopted. During the summer months our visitors increased, and some very distinguished personages honoured us with their presence. On the whole, we may safely affirm that a deep interest is taken in the prosperity of this valuable institution; and that, after another year, when the business is regularly organized and established, it will be in a position to contribute its mite to the regeneration of the agricultural interests of the country.

In the "Balance Sheet," although no rent has been actually charged, I have valued the land at £2 per Irish acre, and debited it accordingly. The amount paid in labour includes both manual and horse labour, and will satisfy any person practically conversant with the subject that the work must have been both laborious and expensive, and that land requiring such expensive tillage could not be expected to realize much profit the *first year*. The amount paid for manure is also very great, but as there was none on the place, and all having to be purchased, it will not be wondered at.

I am, Sir, your most obedient servant,

WM. M'MEEKIN, Agriculturist.

Thos. Kirkpatrick, Esq., M.D.,
Agricultural Inspector, &c., &c., &c.

BALANCE SHEET.

Dr.	£	s	d.	CONTRA.	*Cr.* £	s.	d.
To amount Rent and Taxes,	26	12	11	By amount received for Grain,	1	16	8
,, Seeds, Lime, and Manure,	40	15	1	,, Potatoes, Roots, &c.,	6	7	4
,, Cattle,	60	14	0	,, Dairy Produce,	17	12	3
,, Labour,	83	5	5	,, Inventory and Valuation, inclusive of permanent and unexhausted Improvements,	229	11	7
,, Implements and Repairs,	28	18	5				
,, Miscellaneous,	6	11	9				
,, Gratuitous Labour,	1	10	0				
Profit and Loss, for gain,	7	0	3				
	£255	7	10		£255	7	10

Appendix K.

II. Appendix to Dr. Kirkpatrick's Report.

Glandore Model Farm.

8. Glandore Central Model Agricultural National School, County Cork.

January, 1853.

Sir,—I beg to submit the following Report, for the year 1852, on the Agricultural Department of the above institution.

No important change has taken place in the management of the establishment since the date of my last Report, except the removal of the former Teacher in July last, and the appointment of persons of superior qualifications to conduct the Literary Schools. At that time there was a rumour here that this was to be established as a "District Model School," which had the effect of drawing a large attendance for some time; but as the report proved to be unfounded, the increase of pupils was only of short duration; and at present neither the numbers or acquirements of the pupils are such as to insure perfect success in imparting agricultural instruction. This unfavourable state of matters does not in any way arise from want of zeal or attention on the part of the Literary Teacher; but is entirely owing to local causes, which operate to prevent either a regular or long attendance at school, in consequence of which their literary attainments are generally so limited as to render them incapable of comprehending much of the scientific portions of the course of agricultural instruction.

There are at present 15 boys in the Agricultural Class of the Glandore School, and 10 in that of the Kilmacabea School; and I am happy to say, that although, for the reasons above stated, they have not made much progress in theoretic agriculture, they have acquired a considerable knowledge of the practical details of improved husbandry, especially the pupils of the Kilmacabea School, who, being more removed from the coast, and less connected with seafaring pursuits, devote themselves principally to agricultural operations.

No "Agricultural Boarders' Class," nor "Industrial Class," has been yet established; but these defects, which have greatly retarded our success, I hope soon to see remedied, as I understand measures are in progress to organize such classes.

Farm and Crops.—The farm is divided into three portions, as stated in my last Report. The portion intended for sheep pasture will be all reclaimed this spring; but as it will yet require considerable labour in cleaning, manuring, and tilling, to properly prepare it for the reception of "permanent grasses," a few years must elapse before the intended object will be fully accomplished.

By reference to the "table of cropping," it will be seen that the reclaimed bog, to which I referred in my last Report, has given a very large return, with only a very small outlay for tillage and manure. This is a very good illustration of what such land is capable of doing. On this ground, which was a snipe-walk a few years ago, I grew the largest roots in Munster, some of which were exhibited last season at the Smithfield Cattle Show in London. They were grown on part of the "bogs of this country," which, in their natural state, we

acknowledge to be the worst of all land, but which, if judiciously reclaimed and cropped, would afford employment to the labourer, and good remuneration to the occupier. I have known reclamation to be tried in many places on a small scale, and the results far exceeded the expectations of those who attempted them. Surely it must be a gratifying sight to behold large and luxuriant fields of mangels, and other green crops, superseding that cold, sterile, and repulsive aspect which those wastes previously presented.

Experiments.—I have used a variety of manures, under a variety of circumstances, and carefully noted the different results; and although I do not consider them of such importance as to be deserving of your particular attention, yet they have not been uninteresting to those for whom they were intended. Dry peat mould, or sea-sand, and sometimes both, are daily used in the byre, from which, together with seaweed, I have always a large supply of the very best farm-yard compost. I do not char the peat, nor do I recommend it for farm-yard purposes, the loss of organic matter being so great, besides *dry* peat answers all the purposes required.

The flax crop was tried here the last three years with success. The people are aware of all the advantages to be derived from its introduction; and had they local markets, its cultivation would spread at once through the country; but, until then, it can only occupy a *small* portion of each farm, to supply the domestic wants of the growers.

As the working of this establishment may be considered by many, who are not in a position to appreciate the difficulties that exist, as unsuccessful, I have thought it advisable to procure the testimony of men of station and intelligence, who have had an opportunity of watching its progress, as to how it has been conducted. They have kindly responded to my request, and I therefore beg to submit their statements, as evidence that any want of success has not been owing to want of energy or ability on my part.

You will see, from the Rev. Mr. Sheahan's testimonial, accompanying this Report, that he is about introducing agricultural instruction into all his schools. He has, since the date of Mr. Connor's Report for 1851, succeeded in procuring three Teachers from Dunmanway District Model School, who are qualified to act as Agricultural Teachers. Thus you will see how the benefits of that institution are likely to spread through the country, disseminating agricultural knowledge.

Hoping that when next required to furnish a Report of my proceedings, I shall be in a position to afford a more gratifying account of our progress,

I remain, your very obedient servant,

JOHN KENNY.

Thomas Kirkpatrick, Esq.,
Agricultural Inspector, Education Office,
Marlborough-street, Dublin.

Appendix K.

II. Appendix to Dr. Kirkpatrick's Report.

Glandore Model Farm.

Testimonials.

"Within these few days I have walked over the Glandore Model Farm, and was pleased to see how rocks and furze (in fact, waste) had given place to available tillage or pasture land, by the application of two or three years' perseverance and skill, without incurring an outlay, as I understand from Mr. Kenny, the Manager, that a tenant holding under an ordinary lease would not be fully justified in expending. This I consider a permanent improvement of the highest class; for, in the first instance, it is not merely an improvement, but actually makes that which was *worthless* to become *valuable;* and secondly, it proves that a very great portion of the rocks and furze (the latter generally of the worst description), with which this locality is overrun, may *profitably* be cleared away, that *it pays* to do so, and thus increases the available acreage and, of course, the produce of the country. I saw the farm just about the time Mr. Kenny came to it, and on my last visit I saw the "deformed transformed." A small part of the farm is especially suited to green crops, particularly mangel wurzel, of which circumstance Mr. Kenny availed himself, having raised as fine roots there as I ever saw. He also had green crops on other portions of the farm, not so well calculated to their growth, but which appeared to be necessary for the general management of the farm, which, in my opinion, is extremely good. But I should say, laying out the greater portion of the farm for *sheep permanently* is what it is best adapted for, and would be the most remunerative with reference to the rent, and (what is of more consequence in a model farm) would give some idea of the management and treatment of sheep, which is, I think, the branch of agricultural knowledge the farmers here *are most deficient in,* and which is the more lamentable, as the country in general points to sheep as its natural stock, being rocky, rugged, and seldom producing that rich soft grass, so well known as necessary to a good yield of dairy milk, and too hilly for profitable tillage.

"J. H. H. De Burgh, J.P.,

"Kilfinnin Castle, Glandore.

"April 5, 1853."

"Being in the habit of passing the Glandore Model Farm (for some time in the care of Mr. Kenny), I beg to say his exertions and anxiety to fulfil the duties of his situation could not be surpassed. The transformation of this Model Farm from a wild waste to that of a productive farm, has won for himself, and the system of education he is carrying out here, the approbation of even the opponents of the National Board. I hope, before long, the Glandore establishment, doing so well since Mr. Kenny got charge of it, will be in full operation and of great advantage in the neighbourhood. I will, please God,

be soon enabled, by the joint co-operation of the Commissioners and the landlords, to attach small farms to the other National Schools (five in number) in these parishes, and thereby bring within the reach of my truly poor parishioners the opportunity of giving to their children that kind of education best calculated to promote their future happiness either in their native land or America. Every child thus brought up in habits of agricultural industry is likely to become a good member of society. Mr. Kenny's kind and obliging conduct towards all, but more especially towards those employed by him, is beyond my praise.

"JOSEPH SHEAHAN, P.P.,

"Kilmacabea and Kilfaughnabeg.

"March 18, 1853."

"I have frequently visited the Glandore Model Farm since Mr. Kenny's appointment, and every time much pleased with its general management, and the very judicious way he effected the permanent improvements, which are coming to a close, and must obtain for him the approval of every person capable of forming an idea of modern agricultural improvements. I have experienced, on my own farm, much advantage from his advice and opinion.

"The farm and institution, when in full operation, must have a wonderful effect in the spread of agricultural knowledge in his district (the Skibbereen Union), where the want of which has been so lately attended with such awful results.

"The great variety of green crops cultivated with such success, the introduction of stolen crops, the manufacturing, management, and application of manure, which are being carried out under Mr. Kenny's care, and his great anxiety to make the whole as effective as possible, must ultimately cause the oldest and most obstinate farmer to resign his prejudice, and adopt all the modern improvements.

"WM. LOWTH, Castle Eyre.

"April 4, 1853."

BALANCE SHEET of the Glandore Model Farm for 1852.

Dr.	£	*s.*	*d.*
To Amount of Valuation at the beginning of the year,	147	2	2
,, Rent and Taxes,	31	0	0
,, Manure, Seeds, and Sundries,	39	12	7
,, Cattle and Pigs,	23	0	0
,, Implements and Repairs,	18	11	4½
,, Labour and Wages,	46	14	2
,, Permanent Improvements,	36	9	10½
By Profit and Loss, for gain,	3	4	9½
	£345	14	11½

Cr.	£	*s.*	*d.*
By Sales of Grain,	4	10	2
,, Roots,	4	14	7
,, Live Stock,	34	8	7
,, Dairy Produce,	19	17	9
,, Eggs and Poultry,	1	5	8
Amount of Poor Rates allowed by Landlord,	7	15	6
By Amount of Valuation taken at close of year, inclusive of proportion of Permanent Improvements,	280	18	2½
	£345	14	11½

TABLE showing the CROPPING of the Glandore Model Agricultural National School Farm, for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Oats,	4 0 0	20th March,	20th August,	12 stones,	5 barrels,	3 3 0	0 10 0*p.*	More than an average considering the land.
Wheat,	0 1 20	16th October,	25th August,	10 stones,	4½ barrels,	3 3 0	2 10 0*p.*	Grown on the best of the farm.
Barley,	0 2 20	8th May,	—	12 stones,	5 barrels,	3 7 6	0 2 6*p.*	
Rye,	0 1 0	31st October,	Cut for soiling,	12 stones,	Fed off,	2 0 0	—	The expenses attending cultivation is very low on the reclaimed bog.
Potatoes,	1 1 20	October and Feb.,	August and Sept.,	12 cwts.,	3¼ tons,	10 0 0	0 10 0*p.*	
Turnip, Swedish,	3 2 0	May,	Yet in field,	4 lbs.,	16 tons,	6 10 0	1 10 0*p.*	
,, White Varieties,	1 2 0	June and July,	Fed off,	4 lbs.,	21 tons,	4 5 6	0 10 0*p.*	
Mangels,	1 1 20	1st May,	Yet in field,	5 lbs.,	37 tons,	5 5 0	12 15 0*p.*	Farm-yard manure, mixed with sea-weed and sea-sand, was used in every case, together with about two cwts. of Peruvian guano.
Sugar-Beet,	0 0 20	—	—	5 lbs.,	25 tons,	5 5 0	6 0 0*p.*	
Cabbage,	0 1 20	Oct. and March,	Fed off,	—	—	—	—	
Flax,	0 1 0	1st April,	26th July,	3 bushels,	2½ tons,	5 0 0	—	
Vetches,	2 0 10	Oct. and Spring,	From 12th May,	2½ bushels, & 1 of rye,	From 6 to 16 tons,	4 10 0 manured.	1 2 6*p.*	
Grass for Hay and soiling,	2 1 36	—	—	—	2 tons,	2 3 6	0 16 6*p.*	
,, Grazing,	2 1 22	—	—	—	—	1 10 0	1 0 0*l.*	
Waste,	4 1 0	—	—	—	—	1 10 0	1 10 0*l.*	
Total,	24 3 8							

(Signed), JOHN KENNY, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief,
WM. FITZJAMES BARRY, Manager.

7th March, 1853.

APPENDIX K. II. Appendix to Dr. Kirkpatrick's Report.

9. FARRAHY MODEL AGRICULTURAL SCHOOL, Co. Cork.

Farrahy Model Farm.

January, 1853.

SIR,—In submitting to you my Report on the Farrahy Model Farm for the year 1852, I have to state that, though the produce of the different crops is less than in 1851, the results will be found, on the whole, satisfactory, when the exhausted state of the soil, and the deficiency of farm-yard manure to meet the wants of the entire farm, are taken into consideration.

It will naturally be inquired by persons unaware of the state of this farm when I entered on my duties, or by such as have not watched my proceedings since, how it happens that my "Balance Sheet" for this year shows a loss, while that for the previous year exhibited a gain on the year's transactions. For the information of such persons, I think it right to state that, on my coming here there was no portion of the farm capable of producing a good crop without great expenditure on its improvement. The best part of it was greatly exhausted by the successive growth of grain crops, and was entirely overrun with couch-grass and weeds of different kinds; the remainder, containing about seven acres, had not been laboured for many years previously, and was in such a state that it could not be expected to produce any crop without great outlay in the way of subsoiling, manuring, &c.

Not being able to render the whole farm fit for cropping in 1851, I attended to the portion requiring the least expenditure, and from which I expected the best returns. I allowed the rest to remain in the state in which I found it until the autumn and winter of that year, when I got five acres of it subsoiled with the spade, as stated in my last Report; I kept the remaining two acres for a paddock. After removing the large quantity of stones that had been brought to the surface, and bringing the soil, with great trouble and expense, to a proper tilth for the reception of the green crop seeds, I planted potatoes in drills 27 inches apart, and sowed turnips and mangels in the remainder.

Previous to the potatoes being moulded and the turnips and mangels thinned, I applied a top dressing of quick-lime, at the rate of 50 barrels per acre, which will, I am confident, be of essential benefit to the succeeding crops.

It will appear from the "Statistics of Cropping" appended to this Report, that the produce of the turnips and mangels was below an average; but this need not be wondered at, if the previous condition of the land, and its being so recently subsoiled, be taken into account. The produce of the potato crop was very fair, but more than one-half the entire was diseased at the time of digging.

Having no farm-yard manure in 1851, I was obliged to use artificial manures, by means of which I was enabled to

raise heavy crops of turnips; but these crops left the land in as poor a state as before, the only advantage to the soil was, that they cleansed it, and therefore left it in a fitter state for succeeding crops. It was on a division treated and cropped in this way that I sowed the flax crop, and, in order to carry out the rotation already introduced (the four-crop), I was obliged to sow grass seeds and clover along with it. Owing partly to this circumstance, and partly to the poverty of the soil, the produce was so very small that its growth this year may be considered a failure. In order to avoid sowing seeds with it, I intend giving it, in future, such a place in the rotation as will render this course unnecessary.

Seeing that the portion left as a paddock would produce nothing except heath and furze, I thought it, in that state, useless for its intended purpose; so, in the months of October, November, and December last, I had it subsoiled with the spade to the depth of twenty-two inches. This operation was very expensive; for, on stripping off the surface, which was only five or six inches deep, the subsoil was quite impenetrable to the spade, and the workmen were obliged in every part of it to use the crowbar and pickaxe.

I have now subsoiled, in this way, fifteen of the eighteen acres which the farm contains; and by the time I shall have a boundary fence completed (part of which is now being made), most of the permanent improvements capable of being effected will have been performed.

From the great amount paid for labour, and the partial failure of the most remunerative crops grown, it will evidently appear that there could not have been any other result but a loss this year. All the land intended for cropping next year has been ploughed by means of a horse and a bullock, the latter being very useful for working on the farm, as, being principally fed on green food, his keep is but trifling.

The system of house-feeding the cattle is fully exemplified on this farm throughout the year, and the results, I am happy to say, have been very satisfactory. I was enabled to carry it out in spring by means of stolen crops of rape and winter vetches, which plentifully supplied the cattle till the grass for soiling was fit for cutting. I may here state, that on account of its novelty in this locality, a few of my neighbours adopted it for three or four months last summer; and, being highly pleased with the results, have made preparations for carrying it out more fully next year.

I am happy to state that the example which has been shown on this farm has not been unprofitably thrown away. During the past year many people in the neighbourhood have subsoiled a portion of their farms—levelled old and useless fences—enlarged their fields—and paid particular attention to the after-culture of their turnip crop. I have been frequently called on by the neighbouring gentlemen and farmers for my opinion and advice on the best mode of improving their farms,

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Farraby Model Farm.

stock, &c., and have always given them such information as I thought best adapted to their several circumstances.

The "Agricultural boarders" have given me great satisfaction during the past year, by their uniformly good conduct, and by the strict attention they paid to their studies and to the performance of the farm operations in which they were required to take part. During the last year two of them were admitted to the Glasnevin Establishment to finish their course of training. There are only two here at present; one of whom is a "free pupil," selected from the pupils of the school, and the other pays the usual rate of £6 per annum. Two vacancies remain to be filled up, and two young men from the neighbourhood, who are anxious to be admitted, have made application to the secretaries, through the Rev. W. Maziere Brady. As they have been highly recommended by their respective clergymen and by the neighbouring gentlemen, I trust their appointment will be sanctioned.

Agricultural instruction continues to be given in the school for half an hour on each of the first four days of the week, to a class of boys averaging 24. The boys of this class show a great desire to become acquainted with the improved system of agriculture, and some of them pass other National Schools, and come a distance of three miles to this school. Six of the most deserving in this class compose the "Industrial Class," and work on the farm for two hours on each of the first five days of the week, and for three hours on Saturdays. They are required to take part in every operation on the farm, and receive the usual reward given by the Commissioners, sixpence per week. Their work on the farm does not interfere with their literary studies, as it is after school-hours they are required to perform it.

As I stated in my last Report the insufficient accommodation in the School for the number seeking admission, I am now happy to be able to state that this difficulty will be obviated when the new Male and Female Schools, which have been recently built by the Commissioners, are fitted up for the reception of the scholars.

In conclusion, I beg to return my best thanks to the Rev. William Maziere Brady; Rev. J. J. Golden, P.P.; Rev. D. Walsh, C.C., and to all the neighbouring gentlemen, for their kind co-operation and support, in impressing on those over whom they have influence the beneficial results to be derived from the example shown on this farm, and the utility of combined agricultural and literary instruction.

I have the honour to be, Sir, your obedient servant,

BERNARD SMITH.

Thomas Kirkpatrick, Esq., M.D,
Agricultural Inspector.

"We have this day valued the crops on the Farrahy Model Farm, and having done so for the year 1851, it affords us great pleasure to find the very great improvement effected on this inferior description of land since our former valuation. We beg further to remark the very great improvement in the stock and general management of the farm.

"ANTHONY CARROLL, Farmer.
"PATRICK O'MAHONY, Farmer.

"Dated this 1st of January, 1853."

"I am of opinion that Mr. B. Smith has had many difficulties to contend with in the management of the Farrahy Model Farm during this year. I believe also that he has acted for the best interests of the Commissioners in looking to the future producing power of the soil, in preference to extorting heavy green crops by the use of stimulating manures, whose action he found rather prejudicial than otherwise in the present condition of the farm. Therefore his attention has been, in my opinion, well and commendably directed to subsoiling, although the expense has absorbed a profit for this year. Mr. Smith continues to preserve the good opinion of the gentry and farmers in this neighbourhood.

"W. MAZIERE BRADY, A.M., Rector of Farrahy.

"Farrahy, January 20, 1853."

SUMMARY of the YEAR and BALANCE SHEET of the FARRABY MODEL FARM for 1852.

Dr.

	£	s.	d.
To Amount of Valuation at commencement of the year,	146	8	1
,, ,, paid for Labour,	38	14	2
,, ,, ,, paid for Seeds,	14	15	1
,, ,, ,, Manure,	12	17	5
,, ,, ,, Hay, Straw, Oats, and Bran,	14	5	5
,, ,, Implements and Repairs,	7	7	5
,, ,, ,, Cattle,	20	1	9
,, ,, ,, Rent and Taxes,	10	16	5
,, ,, of Gratuitous Labour of Pupils,	6	0	0
	£271	5	9

Cr.

	£	s.	d.
By Amount received for Potatoes, &c.,	11	18	6
,, ,, ,, for Flax,	9	6	0
,, ,, ,, for Cattle,	10	4	0
,, ,, ,, for Dairy Produce,	13	3	8
,, ,, ,, for Eggs, &c.,	0	12	10
,, ,, of Inventory and Valuation taken at the close of the year, inclusive of Permanent Improvements,	207	7	2
By Profit and Loss, being loss on the year,	18	13	7
	£271	5	9

Table showing the Cropping of the Farrahy Model Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Four Course Rotation :								
1 Oats,	2 0 9	1st April,	1st September,	12 stones,	1½ barrels,	1 18 0	1 3 0*l.*	Almost a failure.
2 Flax, with Grass and Clover Seeds,	1 3 38	1st May,	20th August,	2½ bushels, and 2 Italian rye grass, 10½ lbs. clover.	15 cwts., raw fibre,	4 0 0	Not ascertained.	A light crop—will not cover the expenses.
3 Turnips, White Globe	1 0 10	15th July,	December,	2½ lbs.,	15 tons,	5 10 0	1 10 0*p.*	After rye and winter vetches.
3 Carrots,	0 1 27	24th April,	1st November,	6 lbs.,	10 tons,	5 0 0	5 0 0*p.*	
3 Vetches,	0 1 26	March,	July,	3 bshls. & 1 rye	11 tons,	3 0 0	2 10 0*p.*	
4 Grass,	2 0 9	—	July and August,	2 bshls. Ital. and Peren. rye grass, 10½ lbs. red clover	2 tons,	2 0 0	1 0 0*l.*	
Three Course Rotation :								
Turnips, Swedes,	1 0 0	2nd week in May,	December,	4 lbs.,	18 tons,	8 0 0	3 14 0*p.*	The ground was subsoiled last year.
1 Potatoes,	0 2 30	20th March,	September,	13 cwts.,	3½ tons,	8 0 0	2 10 0*l.*	Three-fourths of the entire diseased.
Mangels,	0 2 16	4th May,	December,	5 lbs.,	7 tons,	8 0 0	2 15 0*l.*	Almost a failure.
2 Turnips, Aberdeen	2 2 0	Last week in May,	Oct., Nov., and Dec.,	4 lbs.,	14 tons,	6 0 0	1 0 0*p.*	Fields No. 1 and 2 in this rotation were subsoiled very deeply.
3 Oats and Seeds,	2 0 15	1st April,	12th August,	12 stones,	7½ barrels,	2 14 2	1 1 10*p.*	
Cabbages,	0 0 20	Nov. and March,	Used through the summer for pigs,	1 bshl. Ital., and ½ Perennial, & 10½ red clover, 4,000 plants,	Not ascertained,	—	—	
Stolen Crops :								
Winter Vetches and Rye	2 0 9	October 16th,	—	3 bshls. vtchs. and 1 rye,	Not ascertained,	—	—	To be succeeded by turnips.
Rape,	0 2 0	September,	—	—	—	—	—	

(Signed), Bernard Smith, Teacher.

20th January, 1853. I certify that the above Returns are correct, according to the best of my knowledge and belief,

W. Maziere Brady, Manager.

Appendix K.

II. Appendix to Dr. Kirkpatrick's Report.

Tervoe Model Farm.

10. Tervoe Model Agricultural National School, County Limerick.

January, 1853.

Sir,—Agreeably to the directions of the Secretaries, I forward you a Report, for the year 1852, of my management of the farm in connexion with the above establishment.

The farm is now under a four-course and a two-course rotation, in the establishment of which I had to expend a considerable outlay in reclaiming from a barren waste nearly two and a-half acres that was occupied by a large "rath," overgrown with furze, and by old dikes, together with the sewering and filling of a large stream, left unfinished by the Board of Works at the time of its drainage. The next season will complete these improvements, after which I trust my Balance Sheet will present a more favourable pecuniary result. The crops grown on the farm, with the produce and other useful details, will be seen in the "Table of Cropping."

When the pressure of the harvest work was over, I commenced making fences around two enclosures—one a crag, which it would be quite useless to attempt to till, as there are only a few inches of surface on it, but which, after burning and extirpating the furze, will yield fine and sweet herbage, on which I intend having six breeding sheep, and the other for exercise ground for the cattle, the latter being convenient to the byres. To this enclosure the sheep can be removed for protection when the severity of winter sets in, where they can be fed on turnips and hay; and should no shed be afforded them, they can be protected at night by lying under the corn stands. All the new fences are planted with whitethorn quicks, placed twelve inches apart, which will, in the course of a few years, besides improving the appearance of the farm, afford protection and shelter to the growing crops.

No "Industrial Class" has yet been formed, which is the only impediment that at present lies in the way of effective instruction, as the Pupils cannot be made to understand the practical details of improved cultivation without assisting in the performance of the different operations.

The "Agricultural Class" still continues to make satisfactory progress under my instructions. The stock are constantly house-fed, with the exception of letting them out for an hour for exercise. They are in a most healthy condition, being regularly supplied with nutritious food, and carefully curried and brushed every morning and evening. The management of farm-yard manure is carefully attended to, being regularly made up twice a-week, and covered over with earth, &c.

I have again to offer to Wm. Monsell, Esq., M.P., and James Barry, Esq., my best thanks for their kind co-operation in forwarding the interests of this establishment.

Hoping this Report may be considered satisfactory, I remain, Sir, your obedient servant,

David Pounch.

Thos. Kirkpatrick, Esq.,
Inspector of Agricultural Schools.

SUMMARY of the Year, and BALANCE SHEET.

Dr.	£	*s.*	*d.*
To Amount of Valuation at commencement of year .	113	15	0
,, paid for Labour, ...	46	3	3
,, paid in Rates, ...	2	0	11
,, paid for Seeds, &c., ...	17	12	3
,, paid for Cattle, ...	11	18	7
,, paid for Implements, . . .	18	1	8
,, Year's Rent, ...	27	8	0
Profit and Loss, being gain, ...	2	9	7½
	£239	9	3½

Cr.	£	*s.*	*d.*
By Amount received for Grain, . . .	24	5	10
,, for sales of Green Crops, . . .	18	6	7
,, for sales of Cattle, . . .	16	13	10
,, for sales of Dairy Produce, . .	7	11	1½
,, for sales of Eggs and Poultry, . .	0	9	11
,, Inventory and Valuation taken at close of year, ...	172	2	0
	£239	9	3½

TABLE showing the CROPPING of the Tervoe Model Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Italian Rye-Grass and Clover,	4 2 17	30th April,	Cuttings in June and September,	Rye-grass 2½ bushels, & 18 lbs. clover,	2 tns., 17 cwts.,	4 10 0	5 17 0	The second cutting was a very heavy crop. The produce given is that of hay, which is exclusive of that used for soiling.
Oats with seeds,	2 2 0	March, 10th April,	18th August,	9 stones,	162 stones,	2 8 0	11 2 0	A weighty crop; the young grass and clover are now promising well.
Oats alone,	3 1 0	6th April,	24th August,	21 stones,	80 stones,	9 2 0	—	This portion was worthless previous to sowing the oats.
Flax,	1 2 0	22nd April,	23rd July,	3 bushels,	2 tns., 5½ cwts.	6 2 10½	2 19 1½	A good crop, sold at £4 per ton.
Potatoes,	0 2 0	9th March,	16th October,	96 stones,	980 stones,	6 4 0	17 18 0	Sown in drills 27 inches apart; sets planted whole, 12 inches asunder; produce all sound.
					tns. cwts. qrs. lbs.			
Carrots,	0 0 24	15th April,	November,	5 lbs.,	16 2 0 0	6 4 0	10 6 0	
Turnips,	2 0 0	6th May,	From Dec. to Jan.,	5 lbs.,	23 11 1 10	6 4 0	4 12 6	Turnips not as good as I expected.
Mangels,	0 2 0	30th April,	November,	6½ lbs.,	13 9 2 0	6 4 0	2 11 6	A poor crop, attributable to a shallow soil.
Vetches,	0 2 0	Sept. & February,	May and August,	3 bshls., 1 stn. of rye & oats,	8 13 1 0	3 12 0	5 7 6	Stolen crop, succeeded by white turnips.
Total,	19 2 1							For all green crops one-half farm yard manure with guano.

(Signed), DAVID POUNCH, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

4th January. W. MONSELL, Manager.

11. KYLE PARK MODEL AGRICULTURAL NATIONAL SCHOOL, County Tipperary.

March, 1853.

Kyle Park Model Farm.

SIR,—I beg to furnish you with a statement of my proceedings on the Kyle Park Model Farm for the past year.

Immediately on my appointment as Agriculturist, in November, 1851, I turned my earnest attention to the cultivation of the farm, which I found still in need of a great deal of improvement.

The division under green crops in 1851 was the first part of the farm we commenced to work at, and though a portion of this had already been cleared of stones, the greater part was too shallow to allow the plough to be worked beyond the depth of four inches, which was very little to expect either good root or grain crops from, the soil being of a light nature. The mode I took of deepening it was to dig it with grope-forks, being the easiest implements for men to work with where so many stones were to be met, and the most effectual for bringing stones and weeds to the surface. The crow-bar and sledge were also required, to break or raise those too weighty for the forks, and too near the surface to be passed over. By these means we left an increased and regular depth of soil throughout the field. The stones were carted off only during dry weather, and the weeds remained on the surface until spring, when it was harrowed, the weeds picked off, and the greater portion of the field ribbed with a one-horse plough for oats. There was nearly a rood in this division under head-ridges, that had never been cropped, and which it took great labour to improve. Grass-seeds and clover were sown in this portion after the oats, and covered by a light harrow. A rood of flax was also sown in this division. The ground got a second digging the first week in April, which reduced it to a very fine state, and the seed was sown the 8th of that month, at the rate of three bushels to the statute acre, covered with a grass-harrow, and rolled. It was pulled, stooked, and windrowed after the Belgian fashion, as I intended disposing of it at the Roscrea flax factory.

The oats on lea, sown first week in March, was nearly as good as that following the green crops. The ground was ploughed in January into ridges of 18 feet wide, and, as the soil was not rich, I had the furrows dug early, and shovelled after the last turn of the harrow.

Green Crops.—The potatoes were drilled the first week in March, and received three ploughings, and an equal number of harrowings, before the weeds could be entirely got off. The kinds planted were kemps and brockley-bank seedlings. The former variety suffered less from disease than the latter. On the first appearance of disease I got the stalks pulled off, which apparently had the effect of arresting its further pro-

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Kyle Park Model Farm.

gress. One plot of brockley-banks growing in the garden was completely cut off, the soil being stronger than that of the field. The land for carrots was prepared in the same manner as for the potatoes, but the drills for carrots were only 22 inches apart—seed sown early in April. At the time of sowing I had a rich compost, made of peat-mould and the contents of the cesspool, spread over the seed in the drill. This caused the seed to come up rapidly. The mangel and turnip crops got similar treatment, but owing to a heavy fall of rain immediately after the mangels were sown, and to a long drought following that, the seed missed, and had to be replaced by the yellow bullock turnip. There was a great loss suffered by this crop failing, as the leaves afford such a large quantity of food at a season when it is most required.

To the division under green crops a kiln of 93 barrels of lime was applied in the compost form, as it was considered that quick-lime would act too powerfully on the soil. After being mixed with earth for some time, it was carted out and spread on the surface, and, by ploughing and grubbing, well mixed with the soil.

I made some peat charcoal, to mix with the guano for the mangel and turnip crops.

Agricultural Instruction.—The number of pupils in the Agricultural Class averages about 10. It may appear strange why so few attend the agricultural lectures, but the greater number are below the age suitable for receiving such instruction, and some of the advanced boys, being destined for other pursuits, do not feel that interest in the agricultural instruction that might otherwise be expected.

"*Industrial Class.*"—There are six boys in this class, some of whom can work efficiently at present, but, owing to their small size, no great results can be expected for some time. Many boys of a larger size were quite willing to join the class at the beginning, but their parents would not consent to it.

Agricultural Boarders.—The number of intern agricultural pupils here at present is but two, one of whom, a free pupil, has been here since July, 1850, and the other, a paying pupil, since 9th February, 1852.

Manure Heap.—This is made up in alternate layers with peat-mould, and frequently watered from the tank. Any quantity of mould can be had from Mr. Stoney's bog, free of cost, by any of his tenants. I have, besides, been indebted to him, on two occasions, for the use of his lime-kiln, as well as other kind acts, for which I feel most grateful.

During the past season I had opportunities of speaking to farmers in this neighbourhood on the cultivation of crops generally, and the proper management of manure. Of the former some appear to have only an imperfect knowledge, and even dispute the propriety of working between turnips after being thinned. The most striking proof of the utility of this operation was shown on the Model Farm last season.

During the dry harvest, almost every field of turnips received a check in their growth, owing to the hardness of the ground about them; but on this farm, where the drills were grubbed between, and well loosened, such was not the case. This fact, I am assured, was more effectual in convincing them of their error, than any amount of abstract reasoning that could be advanced.

Returns.—In the amount for labour is included servant's wages and cost of fuel; the amount for seeds, manures, &c., includes feeding purchased for cattle, &c. I hope the Balance Sheet for the present year will show a more favourable pecuniary result. There was a large sum paid for horse labour, which will not be the case this year, as a bullock has been trained, and is working well, and the purchase of feeding stuff will not be necessary, as it was last season.

I have not included the garden crops in the returns. Some of its produce was sold, more used in the house, and the cattle consumed a portion. A great improvement has been effected on the condition of the garden, by trenching and the addition of rich compost, composed of weeds and lime; but its northern aspect operates against the production of winter and early spring crops.

I have the honour to be, Sir, your very obedient servant,

MATHEW RYAN.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

TABLE showing the CROPPING of the Kyle Park Model Agricultural National School Farm, for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observation
	A. R. P.					£ s. d.	£ s. d.	
Oats,	5 3 0	March,	August,	10 stones,	8 barrels,	3 12 0	0 17 0*p.*	Grass seeds were sown in one division under oats, and their cost, together with the extra expense of removing stones, reclaiming head-ridges, and clearing it of weeds, is included in the estimate.
Potatoes, Kemps and Brockleys,	0 1 20	9th March,	October,	10 cwts.,	4tns. Kemps, 3¼tns. Brocks.	7 14 0	4 16 0*p.*	
Carrots,	0 1 0	15th April,	November,	6½ lbs.,	16½ tons,	6 5 6	10 9 6*p.*	
Mangels and Turnips,	0 3 20	8th May,	November,	7 lbs.,	24½ tons,	6 18 4	4 2 0*p.*	
	—	June,	—	2½ lbs.,				
Turnips, Swede,	0 2 30	10th May,	—	4 lbs.,	26½ tons,	6 13 0	6 12 0*p.*	
,, Aberdeen,	0 0 38	1st week in June,	December,	3½ lbs.,	12 tons,	5 4 0	0 4 0*p.*	Followed rape.
,, Globe,	0 2 14	3rd and 25th July,	Given to cattle in Oct. and Nov.,	3½ lbs.,	14tns.(mean),	5 4 0	0 15 0*p.*	After winter vetches.
Cabbage,	—	June and July,	—	2 ft. by 20 in.,	—	—	—	In head-ridges of potato and carrot ground.
Vetches,	0 1 10	2nd March,	Used for soiling in June and July,	1½ stn., & 3 stn. of oats,	8 tns., green,	4 15 6	1 11 6*l.*	On very poor lea ground.
Flax,	0 1 0	8th April,	7th August,	3 bushels,	3 tons,	5 5 0	4 15 0*p.*	The cost of grass seeds sown with this crop is not included.
Grass, 1st year,	3 0 16	—	July,	—	1 ton (hay),	—	—	These crops were sown by my predecessor. The field under grass first year did not pay the cost of cultivation, several parts being entirely bare of grass.
,, 2nd year,	2 1 0	—	July,	—	2 tons (hay),	—	—	
Stolen Crops:								
Rape,	0 0 38	—	—	—	Would not pay forseed & labour.	—	—	
Vetches,	0 2 14	—	Cut green for cattle during summer,	—	6 tons,	7 2 6	4 14 6*l.*	This was a bad crop, owing to the poor state of the ground.
Total,	15 2 0							

NOTE.—The Garden Crops are not included in the above.

(Signed), MATHEW RYAN, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

9th April, 1853. THOMAS GEORGE STONEY, Manager.

12. DERRYCASTLE MODEL AGRICULTURAL SCHOOL, County Tipperary.

April, 1853.

SIR,—In forwarding this Report of my proceedings here for the past year, I have much to regret not being able to lay before you more satisfactory results from the year's transactions. This is owing to the great and unexpected difficulties that have arisen in the improvement and cultivation of the Model Farm, some of which, unfortunately, it will never be in the power of human skill to remedy or remove. It has been stated in my former Report that no fences capable of preserving crops from damages existed on any side of the farm, and this, during the past year, has led to very serious losses and disappointments.

It can readily be seen that it was quite impossible, with the very limited supply of labourers in this locality, to have these fences made secure before last season, and attend to the other business of the farm; and the consequence has been that every crop grown was damaged by cattle and other animals breaking in at night, during different stages of the growth of each kind of crop.

Under ordinary circumstances, the most prudent course would certainly have been to have the fences made secure before cultivation would be attempted. Our case was an exception, to a certain extent. I saw that before the land could be brought into cultivation, more stones would have to be raised than would be necessary to build a wall round the entire farm; it was, consequently found most judicious to have these works going on simultaneously—clearing the land a sufficient depth, carting off the stones at the same time, and building them into a permanent boundary wall. My whole efforts were consequently directed, during the past summer, autumn, and winter months, to the completion of these works, in order to have the farm made secure for the present year's cropping, and thus prevent a recurrence of the damages sustained during last season.

All the farm is now cleared of stones to a sufficient depth for ordinary cultivation, with the exception of about $2\frac{1}{2}$ statute acres. In one acre of the uncleared portion the rock rises to the surface, and this is being enclosed at present for a paddock or exercise ground for the cattle. A permanent boundary wall, 530 perches long, has been built with the stones raised, besides about two thousand tons that had to be buried in pits and hollow places. To enter into minute details of the amount of labour expended in carrying out these improvements would carry this Report to an inconvenient length; but I may observe that, from the constant supervision exercised, they could not be effected, under any circumstances, or in any part of this country, on a more economical scale. No doubt such operations could be imitated by but very few farmers working

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Derrycastle Model Farm.

on their own capital; but in this case there was no alternative but to have them carried out, or abandon altogether the idea of cultivating the land.

It will be here seen, that as the preparation of the soil for the various crops, up to this time, could not be executed in the usual manner—that every perch now in cultivation had to be first cleared with the crowbar and pick, no estimate could be formed of the expense of cultivation, nor could any accurate return be made of what might be the produce per acre of any crop, from the damages done to each, as already alluded to.

Flax has been cultivated to the extent of 3 roods 10 perches statute, but without much success, the soil being unfavourable for its growth. As there were no mills in the locality to have it prepared for market, I had it pulled, rippled, and steeped on the same day, afterwards hand-scutched; the produce, which was only between 11 and 12 stones, remains yet unsold.

I stated in last Report that on one division of the farm then cleared of stones, containing 8 statute acres, the "five-course rotation" was intended to be carried out, but the experience of the past year has convinced me that laying this down to permanent pasture, with suitable grasses for sheep-farming, will be the most profitable, and, at the same time, the best example that could be set to the neighbouring farmers, for the following reasons:—great difficulty will be always experienced in carrying out successfully the system of "house-feeding cattle," from the fact that no green feeding can be raised during the months of April, May, or June. All vegetation ceases here from the month of November until the middle of May, and any seed sown during that period remains perfectly dormant. I have twice attempted to grow winter vetches (this season on a piece of ground dry and well manured); in both cases a complete failure has been the result. The elevation of the farm itself (700 feet) is not the cause of this serious disadvantage, but its lying at the bottom of a mountain, which rises on the south-eastern side to a height of 1,500 feet, and covered on the top for nearly a mile, with bog and swamps, from which chilling blasts sweep down over the land beneath, retarding all vegetation.

The attendance of pupils at the School is not numerous, from the circumstance that the population of an area of $2\frac{1}{2}$ square miles around this School is only 96 families, a great proportion of the members of whom are labourers employed in the slate quarries, whilst there are only five of these families at present able to live from the resources of their farms. Were it not for the extensive employment given by the proprietor, in the improvement of the land on his own hands, this neighbourhood would have been before this a complete desert.

As all my time was necessarily engaged on the farm up to

the present, but little could be devoted to giving any instructions to farmers in the neighbourhood, although frequently solicited to do so; the improvements that can be observed amongst them, consequently, are yet but few.

I confidently anticipate that, notwithstanding the difficulties to be overcome, the returns of next season will show a favourable result, and that the general working of the school and farm will fully carry out the benevolent objects of the Commissioners.

I have the honour to remain, Sir, your obedient servant,

FRANCIS HEALY, Agriculturist.

Thomas Kirkpatrick, Esq.,
Agricultural Inspector.

Appendix K.

II. Appendix to Dr. Kirkpatrick's Report.

Gormanstown Model Farm.

13. Gormanstown Model Agricultural School, County Tipperary.

January, 1853.

Sir,—I beg to submit to you a brief Report on the above establishment, together with the balance-sheet of the farm accounts, and the usual returns for the year 1852.

Agricultural Instruction.—As the Literary School has not yet come into operation, nor are there any agricultural boarders yet admitted, I have no observations to offer under this head, save that I think I am justified in saying, that the example of improved husbandry exhibited on this farm is already producing a good effect in the neighbourhood.

Improvement and Cultivation of the Model Farm.—As there were no pupils to perform any of the operations, all the work had to be effected by hired labourers, who, I am happy to say, worked very attentively and efficiently. Six statute acres were subsoiled fourteen inches deep, at a cost of £1 4*s.* 6*d.* per acre; and fifty-two perches of an old fence were levelled, at a cost of thirteen shillings. All the old internal fences have now been removed; but, as yet, the external fences are in a backward state. I expect that efficient stone fences will be erected where necessary during the coming season.

Results of Cultivation.—A reference to the table of cropping appended to this Report will show the varieties, extent, and returns from the different crops cultivated; and the balance-sheet of the farm accounts will show the pecuniary gain attendant on the transactions of the year. It will be seen that the amount realized by sale of pigs is considerable. The amount of dairy produce is also pretty large, in proportion to the number of cows kept. On yesterday, I sold a firkin of butter in Clonmel market. It went first quality, and realized the largest sum obtained for a single firkin for the last ten months. The merchants were surprised how I could have such quantity and quality from two cows fed on turnips.

On the occasion of taking the "Inventory and Valuation," Francis Baggot, Esq., Kilballygorman, and two other gentlemen of approved skill and experience in such matters, kindly lent their assistance. I beg publicly to thank those gentlemen for their kindness on this occasion, and for the very warm interest they manifest in the welfare of this institution.

I am, Sir, your very humble and obedient servant,

P. R. Tierny.

In submitting this our second valuation of the stock, crops, &c., on the Gormanstown Model Farm, it gratifies us much to see the great improvement effected in the land, and the great amount of produce from the cultivation of twenty sta-

tatute acres of land. The stock are of an improved breed, in good condition, and exhibit the best of care. One of the calves is very fine, and worth six pounds.

From the great return obtained from this small farm in so short a time, we are of opinion that if it were increased in extent, so as to correspond with the general size of farms in this neighbourhood, the objects for which it was originally instituted would be better attained.

The very great delay that there is in opening the Literary Schools is a great loss to the children, and is deeply deplored by their parents. It is earnestly hoped that they will be promptly put into operation.

Dated this 30th day of December, 1852.

FRANCIS BAGGOT, Kilballygorman.
JOHN RICE, Scarte.
JAMES FENNESSEY, Garryduff.

BALANCE SHEET of FARM ACCOUNTS, for 1852.

Dr.	£	*s.*	*d.*
To Amount of Valuation, taken 31st December, 1851,	127	3	6
,, Rent,	20	0	0
,, Seeds, Lime, and Sundries,	39	13	9
,, Cattle,	31	14	6
,, Implements and Repairs,	9	13	4
,, Labour,	73	18	7
,, Profit and loss for balance, being gain on the year,	45	5	8
	£347	9	4

Cr.	£	*s.*	*d.*
By Amount received for Grain,	25	10	2
,, received for Potatoes, Roots, &c.,	7	18	5
,, received for Pigs sold,	50	16	0
,, received for Dairy Produce,	18	4	0
,, received for Eggs and Poultry,	1	0	0
,, Inventory and Valuation, taken 31st day of December, 1852, inclusive of permanent and unexhausted Improvements,	244	0	9
	£347	9	4

P. R. TIERNEY.

TABLE showing the CROPPING of the Gormanstown Model Agricultural National School Farm, for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre, on the Culture.	Observations.
	A. R. P.				tns.cwts.qrs.lbs.	£ s. d.	£ s. d.	
Oats,	4 2 0	29th March,	14th August, to	15 stones,	0 13 0 14	2 17 10	2 2 9½p.	
Oats with seeds,	4 0 0	10th April,	4th September,	12½ stones,	0 19 1 0			
Barley,	0 2 20	28th April,	9th September,	8 stones,	0 18 0 0	3 1 7	3 8 0p.	
Vetches,	1 1 0	Sept., 1851, & 23rd April, 1852,	Cut for soiling in May, June, & Aug.,	8 stones,	Cut green, 7 tons,	2 5 1	0 12 10p.	
Grass,	1 0 30	October, 1851,	28th June; saved seed of 60 perches, soiled the remainder,	1½ bush. Ital. rye-seed, 6 lbs. red-clover,	Cut green 5 tns., or 2½ tons hay,	2 18 2	1 0 6½p.	
Potatoes,	2 3 20	24th Feb., 6th April,	27th Sept. to 15th Oct.,	9 cwts.,	Sound, 4 tns.,	9 8 1½	7 15 6½p.	
Mangels,	1 3 0	3rd May,	10th November,	4 lbs.,	18 tons,	8 5 1	0 19 1½p.	
Carrots,	0 1 10	26th April,	8th November,	5 lbs.,	16 tons,	8 10 0	6 6 8p.	
Turnips,	3 3 0	29th May, to 3rd July,	28th November,	4½ lbs.,	23 tons,	6 13 6	4 5 2p.	
Cabbages,	0 1 20	Nov., 1851, & Feb. and July, 1852,	May, June, and July; consumed by cows in the byre,	12,250 plants,	—	8 4 8	6 17 9p.	
Total,	20 2 20							

(Signed), P. R. TIERNEY, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief.

8th January, 1853. JOHN BAGWELL, Manager.

APPENDIX K. 14. LEITRIM MODEL AGRICULTURAL SCHOOL, County Leitrim.

H. Appendix to Dr. Kirkpatrick's Report.

Leitrim Model Farm.

31st December, 1852.

SIR,—In conformity with your instructions, I beg to submit the following Report of my proceedings, since my entry on my duties as Agriculturist in the Leitrim Model Agricultural School.

The farm, which contains fifteen statute acres, has a north-westerly aspect; and about two-thirds of it is of a poor description of clay soil, with a stiff retentive subsoil of the clay-slate formation. The remaining one-third is a deep peat, part of which is subject to occasional inundations of the Shannon.

When I entered on the farm on the 21st of June last, I found it in a very neglected condition, crowded with useless fences, and for the greater part overrun with weeds. My first object was, to get in some green crops. This was no easy matter so far advanced in the season, and without the principal agent, manure. However, I succeeded in getting in about five acres of turnips, rape, cabbages, &c. I got the land ploughed into ridges, six feet in breadth, with two-feet furrows. I then got the ridges formed on the lazy-bed system, and applied guano at the rate of three cwt. per statute acre. I then formed drills across the ridges, eighteen inches apart, and put in the seed, with one and a quarter cwt. super-phosphate of lime. By this system I was enabled to destroy the weeds, or to retard their growth until the crops got above their reach. It being too late for the sowing of Swedish turnips and mangolds, and, knowing the loss that would be sustained if I had not a quantity of them for the feeding of pigs, &c., I transplanted a rood of mangolds, and half a rood of Swedes, giving the land the same preparation as above mentioned. The plants I obtained from F. La Touche, Esq., who was kind enough to give orders to his steward to give me what plants I required.

Rape.—For this crop the land underwent the same cultivation as before described, except that the ridges were formed eight feet in breadth and the furrows eighteen inches; the seed sown broadcast and rolled. This is a promising crop, and will give an abundance of green feeding in spring.

Cabbages.—The land for this crop was ploughed at the same time as that for the other green crops, and left so until October, when I got it harrowed as finely as possible, and all the grass sods that were not sufficiently decomposed picked off and formed into a heap. This will make a valuable compost when mixed with lime. I then got the land dug to the depth of ten inches, and a sufficiency of burned ashes spread over it, the drills formed, and the plants, of which I had an abundance from a sowing made in July, dibbled in. The ashes I obtained, by burning a portion of a large bank of road-cutting that is formed on the eastern side of the farm, which

gives an unsightly appearance, besides occupying a large space of ground. I consider it would be too expensive to attempt removing it all at once, but I expect, by degrees, to be able to convert it into a profitable manure, by burning, with little expense of labour. I have also made a sowing of about half an acre of winter vetches. The part in which it is sown was in a very foul state. I am informed by the former occupier of this part of the farm, that it was after giving four grain crops in succession without the aid of manure. This plot I got dug ten inches deep in the month of July, at the same time taking up to the surface as much of the subsoil as possible, and leaving it exposed to the sun and weather until the month of October, at which time I got it harrowed, grubbed, and all the weeds thoroughly eradicated. After applying the burned ashes, I got it ploughed into eight-feet ridges, sowed the seed broad-cast, and covered it by harrowing, and shovelling the furrows. This crop, at present, looks well, and is sufficiently forward to be able to stand the frost. When the weather happened to be unfavourable for the management of the crops, I was engaged in levelling the old fences and in draining. I have all the useless fences now completely levelled, with a gain of one acre and twenty-two perches of ground. The portion of the farm that I have got drained is that intended for the garden. The drains were cut four feet deep and thirty feet apart, filled with broken stones to the depth of twelve inches, and covered in the usual way. This was a difficult operation, owing to the number and largeness of the stones met with in the subsoil, and that had to be blasted and removed in the process of excavation.

I had also to make a new boundary fence on three sides of the farm, and to repair that on the fourth. F. La Touche, Esq., defrayed half the expense incurred on the two sides adjoining his demesne. I am at present engaged in making the fence on the eastern side of the farm, which is difficult and expensive; as it is on this side the large bank of road-cutting is formed. I have to cut down to the level of the field to get the quicks on the good soil, at the same time shifting off the bad earth. The quicks that I am putting in are those that I got carefully raised in levelling the interior fences of the farm. This fence, when completed, will prove a valuable protection, and a vast improvement to the appearance of the farm.

The rotations which I consider best adapted to the soil are the three and four course shifts, and I expect to have them fully established in the ensuing season.

The stock on the farm at present consists of a milch cow and pony; but as I have now an abundance of feeding, I will be enabled to keep three additional cows.

There are no Agricultural Boarders yet admitted, although there were several applications forwarded, which have not yet been decided on. Indeed there are applications for the

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Leitrim Model Farm.

admission of more boarding pupils than there is accommodation for in the establishment.

I expect immediately to form an "Industrial Class" from the pupils of the Literary School, the members of which can be usefully employed on the farm for a few hours daily, besides giving them a knowledge of the improved practice of Agriculture, and instilling into their minds habits of industry and correct management.

In conclusion, I beg to offer my best thanks to F. La Touche, Esq., for his kind co-operation and assistance in forwarding the interests of this establishment, without which, I feel satisfied, that I should have suffered many inconveniences.

I have the honour to remain, Sir, your obedient servant,

CORNELIUS BEHAN, Agriculturist.

T. Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

BALANCE SHEET.

Dr.	£	s.	d.
To amount Valuation, commencement of year,	0	0	0
,, paid for Rent, Taxes, &c.,	7	0	10
,, paid for Seeds, Lime, Manure, &c.,	11	9	0½
,, paid for Cattle during the year,	19	0	0
,, paid for Farming Implements,	23	7	6
,, paid for Labour,	48	5	8½
,, Miscellaneous Expenses,	2	10	0
,, Profit and Loss for balance, being gain on the year,	18	13	3
	£130	6	4

Cr.	£	s.	d.
By Amount received for Dairy Produce of one Cow for six Weeks,	0	18	9
,, Inventory and Valuation taken at close of year, inclusive of proportion of unexhausted Improvements,	129	7	7
	£130	6	4

TABLE showing the CROPPING of the Leitrim Model Agricultural National School Farm, for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.				tons cwts.	£ s. d.	£ s. d.	
Turnips, Aberdeen,	2 1 22	24th & 26th June,	December,	3 lbs.,	13 10	4 1 3	2 13 9	The produce, per acre, of these crops is much below an average under proper cultivation, but they are as good as could be expected, considering the period of the season in which I commenced their cultivation.
,, Hybrids,	0 2 8	6th July,	December,	3 lbs.,	17 0	4 1 3	4 8 9	
,, Swedes,	0 0 24	4th August,	November,	Transplanted,	14 0	4 10 0	6 0 0	
Mangels, Long Red,	0 0 20	8th July,	November,	Transplanted,	16 10	4 10 0	7 17 6	
,, Yellow Globe,	0 0 20	8th July,	November,	Transplanted,	29 15	4 10 0	11 1 3	
Rape,	1 1 11	12th July,	Still growing,	12 lbs.,	—	3 2 9	—	
Cabbages,	0 3 11	6th October,	Still growing,	Transplanted,	—	5 0 0	—	
Cabbage Plants,	0 1 0	13th August,	Still growing,	10 lbs.,	—	5 0 0	—	
Winter Vetches,	0 2 8	13th October,	—	12 stones,	—	3 15 0	—	
Grass,	3 0 0	—	September,	Old lea,	2 0	1 15 0	1 4 7	

(Signed), CORNELIUS BEHAN, Agriculturist.

I certify that the above Returns are correct, according to the best of my knowledge and belief.

FRANCIS LATOUCHE, Manager.

15. Report of the Mount Trenchard National Model Farm. Appendix K.

II. Appendix to Dr. Kirkpatrick's Report.

Mount Trenchard Model Farm.

October, 1852.

Sir,—When commencing operations in 1850 there were many difficulties to be overcome, and in order to convey more clearly an idea of those difficulties, and the particulars of the farm as regarded the subdivisions, reference may be made to the appended map, No. 1, which represents the farm in its original condition—the ink lines showing the old sod fences, and the dotted ones raised banks of earth, which required to be either levelled or removed.

The land, situated on a mountain, is of an average quality, naturally very much in need of drainage, partially producing furze and rushes, with an unusual quantity of scutch-grass, and part of it having been previously under cultivation, was very much neglected and exhausted.

The first operation was thorough drainage, with pipe tiles, at depths and distances suited to the nature of the soil, part of which rested on a subsoil of strong clay, and part on a bed of slate clay. The whole of the interior fences and banks of earth were then removed, and as the former position of the fields did not suit the intended arrangements, the foul and exhausted parts were put under a course of tillage, with the view of bringing to equal fertility the different portions of the fields in the former divisions, which are now combined in the new. This object being accomplished, the whole farm was subsequently divided into nine parts, of about equal extent, a tenth being appropriated to the buildings, stack-yard, vegetable garden, and paddock, and the farm is now laid out and worked in two divisions, exhibiting the four and five shift rotations, which were cropped during the past year, as represented on map No. 2, the dotted lines showing the boundary or distinction between the fields, &c.

The great object in view during the past time was to bring the land under the desired rotations in as short a time as possible, and to render the different parts of each field or division of equal fertility; and though this has been accomplished as quickly as practicable, and taking into account the peculiarities and difficulties of the case, it is satisfactory to see the superior crops of oats, mangels, turnips, parsnips, and, in particular, the clover and rye-grass that have been produced within the present year. It should be specially remarked that the farm buildings were not available till within a few weeks ago, and consequently no cattle were kept on the farm, therefore little manure could be produced—so that, up to this time, the success attending the cultivation may be entirely attributed, not to the effects of heavy manuring, but to well-directed labour. *This proves satisfactorily that even on land of inferior quality most important results can be attained by energy, perseverance, and a due expenditure in labour.*

Some idea of the former state of some portions of the farm

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Mount Trenchard Model Farm.

may be formed even by persons who have not seen it, from the fact that this year two heaps of weeds, measuring jointly *forty yards long, four feet high,* and *twelve feet wide,* have been removed from *five statute* acres in preparing them for green crops; and as a test of the efficacy of the drainage, and the general improved state of the farm, it is admitted that whilst the lands lying immediately beyond the boundary would pay ten shillings per acre, the Model Farm would pay one pound, though, but two years since, they were both of equal natural quality and value.

Already many gentlemen of known and admitted abilities in agriculture have expressed their highest satisfaction on visiting the farm, amongst whom I may mention Richard Griffith, Esq., Chairman of the Board of Works, who saw the land in its original condition, and who, at a recent visit, was pleased to say that he had not seen so decided a change for the better on any other piece of land in so short a time.

The working farmers, too, of the district have not been wanting in the expression of their approval. They take every opportunity of visiting the farm, and watching the progress of improvements. The whole produce of the farm has been well saved, and is in the stack-yard, and consists of ten stacks of oats, two large stacks of hay, one acre and a-half of potatoes, a quarter of an acre of parsnips, two acres of mangels, two acres and a-half of turnips, together with one acre and a-half of winter vetches, winter cabbages, and rape, the estimated value of which will be shown in my returns at the end of the year.

A small farming society has been this year formed among the tenants of the Mount Trenchard Estate, the members of which, at their late anniversary, took an opportunity of visiting the Model Farm, and examining into the system pursued, and its results. Perhaps it is not presumptuous to attribute much of the improved cultivation now in progress in this district (and which, in many cases, is giving effect and value to drainage under the Land Improvement Act), to the example of systematic agriculture shown on this Model Farm.

The boundary fence, jointly executed by the Commissioners and Lord Monteagle, is strong and good. The quicks are growing admirably. There remains, however, still to be made 274 yards of road fence with piers and gates, and the enclosure of the small paddock for the exercise of the stock, which is very much required. Lord Monteagle will give the stone piers from his quarry free of royalty, and it is recommended that the enclosure should be made by an iron wire fence run through timber posts. The timber will also be supplied by Lord Monteagle.

I am, Sir, your obedient servant,

P. O'CONNOR, Agriculturist.

Thomas Kirkpatrick, Esq., M.D.,
Inspector of National Agricultural Schools.

Mount Trenchard Central Model Farm BALANCE SHEET, for the year 1852.

Dr.	£	*s.*	*d.*
To Amount of Valuation at commencement of year,	165	1	2
,, Rent and Taxes,	19	0	2
,, Seeds, Lime, Manure, &c.,	13	4	8
,, Cattle, Bran for Cattle, &c.,	5	9	0
,, Implements and Repairs,	7	6	0½
,, Paid for Labour,	52	18	11
,, Profit on the year's transactions,	15	9	5½
	£278	9	5

Cr.	£	*s.*	*d.*
By Amount received for Grain sold,	29	2	1½
,, Potatoes, Roots, &c.,	35	8	8½
,, Cattle sold,	15	0	0
By Amount of Valuation, at close of year, 1852,	198	18	7
	£278	9	5

TABLE showing the CROPPING of the Mount Trenchard Central Model Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Oats,	11 2 9	April,	August and Sept.,	12 stone,	110 stones,	2 8 0	1 17 0*p.*	
Mangels,	2 0 0	May,	December 4,	5 lbs.,	18 tons,	4 7 7	6 8 5*p.*	
Turnips,	2 0 30	May,	December,	5 lbs.,	22 tons,	4 11 4½	6 2 6½*p*	
Parsnips,	0 1 0	April,	October,	4 lbs.,	6 tons,	3 4 8	6 15 0*p.*	
Potatoes,	1 0 37	Feb. and March,	October,	12 cwt.,	9 barrels,	6 2 6	2 15 5	Half the tubers raised from sea-weed were diseased.
Cabbage,	0 1 0	—	—	—	—	—	—	No return kept.
Rape,	0 2 0							
Hay,	8 1 34	April,	June,	1½ bushels perennial rye-grass, and 10 lbs. of red clover per acre. 2 bushels Italian rye-grass, and 10 lbs. of red clover per acre,	2 tons,	1 4 8	0 17 4	

(Signed), PATRICK O'CONNOR, Teacher.

I certify that the above returns are correct, according to the best of my knowledge and belief.

STEPHEN E. DE VERE, Manager.

16. Woodstock Model Agricultural School, County Kilkenny.

January, 1853.

Woodstock Model Farm.

Sir,—I beg to forward you my Report of the above School for the past year, also the Returns of Statistics and Cropping, and the Balance Sheet of the Farm Accounts.

Preparation of the soil.—Having, as stated in my last Report, subsoiled two divisions, and ridged up a third, as soon as the weather became favourable for the spring work, I had that which had been ridged prepared for potato planting. I next turned to the subsoiled divisions, which were intended for mangel and turnips. I employed horses and a sufficient number of hands to have the stones removed, beginning with that intended for mangel, which, when cleared, I had deeply ploughed and well harrowed, to have it properly mixed and pulverized. This process exposed many smaller sized stones, which were picked off and carted to the dyke. I then rolled with a heavy roller; very many lumps on which the roller had no effect I got broken with mallets, &c. The weather continuing still fine, I took advantage of it, drilled, manured, &c., and had all completed by the 15th April. I now turned to the other division, and had it similarly treated on 22nd May.

Cropping.—I had the greater portion of the potato planting finished on the 20th March. The crop in general was not very good, though I have reason to think that the variety (leather coats) is one of the best in this country, yielding at the rate of from 1,000 to 1,200 stones to the statute acre, and withstanding the effects of the disease better than most other varieties. The inferior produce in my case may be attributed to the wetness of the season, combined with the natural stiffness and wetness of the land (the surface being very shallow, and the subsoil a tenacious clay), which prevented any attempt at after-culture, except in a few places. When harvesting the crop, I found, on estimating the produce, that, while the yield from the portions where no after-culture could be performed was only 200 stone, that from the portions where the after-culture was carried out was 1,200 stones to the Irish acre. I did not fail to direct the attention of the pupils to this fact, and to impress on them the expediency of planting their potatoes only in such situations as will admit of the after-culture being performed, no matter how wet the season may turn out.

I commenced sowing mangel on the 29th of April, and finished on the 5th of May. There were some heavy showers both at the time of sowing and after, so that when the drought set in, a very hard crust formed on the tops of the drills, which caused almost a total failure, though I had the crust carefully broken. I resowed with yellow globe mangel, and

APPENDIX K.

II. Appendix to Dr. Kirkpatrick'sReport.

Woodstock Model Farm.

Swedish turnips on the 31st May, dropping seeds of each kind into the same hole or rut, my object being to avoid a further failure in the crop, which, up to this, seemed anything but a *model*. Both turnips and mangels came forward, and from the healthy appearance of the former, and the lateness of the season for the latter, I gave a preference to the turnip, by leaving the majority of plants of that crop remain. This field became the topic of discourse among the neighbouring farmers. The other subsoiled division, under Swedes, could not be excelled, taking the nature of the soil, &c., into account.

The Right Hon. W. F. Tighe, at the Innistiogue Farming Society's dinner last September, was kind enough to speak in very flattering terms of the cropping and general management of the farm. He appealed to a respectable tenant farmer who lives convenient, as to the condition of the Model Farm when I got it, and the reply was, that "a worse piece of land could not be had." I may confidently assert that the working of the farm has already done more good here (and is likely to do still more) in the way of promoting green cropping, &c., than the most sanguine could have anticipated.

House-feeding of Stock.—The house-feeding was but partially carried out up to November last, for want of a sufficiency of food; but from that period it has been regularly attended to. I have a large supply of turnips at present, but no stolen crops either of rape, cabbages, or even vetches. This may appear as very bad farming; but I have been prevented from following out a better course from the want of proper fences.

Manure.—Not having, as I before mentioned, a sufficiency of food to keep my cow constantly in house, I had to purchase a considerable quantity last spring. Having some straw to spare in the latter end of April, I had recourse to the following mode of converting it into manure—I got the dung-pit enlarged, and had alternate layers of the soil taken from it and the straw put into the pit with liquid manure from the tank on each layer. I left it in that state for three or four weeks, when I turned out manure of very superior quality, and from which, with the aid of a little guano as a stimulant, I raised a crop of Swedes thirty-five tons to the Irish acre. I have an excellent heap of manure at present, so I hope I shall have to purchase none for the ensuing season.

General Improvement.—There is little done in this respect, with the exception of the subsoiling, cleaning, and filling of the gripe at the east boundary, the formation of the road from the front door of the dwelling-house to the public road. A good deal remains yet to be done, but which cannot be attempted until after the fences are made.

Industrial Class.—The boys of this class did not attend regularly, being principally engaged on their fathers' farms. I expect, after a little time, to form a class on whom I can rely for regular attendance.

Literary Department.—I am happy to tell you that my anticipations of the school have been fully verified. The marked improvement in the literary acquirements and deportment of the pupils has gained a character for the Woodstock Model School, which I trust it shall long maintain. I believe the Reports of the Head and District Inspectors on the General Examination held in this School in last October will bear me out in this assertion. I send you the Report of the visitors who were present on the occasion.

Agricultural Boarders.—This class consists of only two boys at present; one was admitted in August last, the other, a free pupil, was admitted from the "Industrial Class" on 1st December last. They are both careful and diligent, and seem anxious to improve. The Commissioners have recently sanctioned the appointment of a third boarder, whom I expect in a short time.

I trust I shall be able to furnish you with more favourable Reports henceforward, when those obstacles that at present retard my progress will have been removed. Yet I flatter myself you will be satisfied with the present, particularly when you come to the "Balance Sheet," &c., and contrast it with that furnished for 1851, the first year of my operations. I think you will admit that it is good farming on *bad* land, and that the views and expectations of the Commissioners have been satisfactorily carried out.

I am, Sir, your obedient servant,

JOHN LYNCH.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

Woodstock Model Farm BALANCE SHEET for the Year 1852.

Dr. EXPENDITURE.	£	s.	d.
To Amount of Valuation at commencement of year,	36	13	2
,, Seeds and Manure,	10	16	5½
,, Cattle, Pigs, &c.,	10	2	0
,, Cart and Harness,	2	14	6
,, Implements,	0	12	7
,, Labour,	18	6	1
,, Do., of Pupils,	1	4	0
,, Rent,	8	14	4½
To Profit and Loss, being gain on the year,	15	3	10
	£104	7	0

RECEIPTS. *Cr.*	£	s.	d.
By Amount received for Grain,	9	9	0
,, Potatoes, &c.,	13	3	6
,, Two Pigs (3 cwt.,)	6	0	0
,, Dairy produce,	9	17	4½
,, Eggs and Poultry,	3	17	6½
By Valuation at close of year,	61	19	7
	£104	7	0

TABLE showing the CROPPING of the Woodstock Model Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied. A. R. P.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c. £ s. d.	Profit or Loss per Statute Acre on the Culture. £ s. d.	Observations.
Winter Oats,	0 3 4	November,	August,	12 stones,	11 barrels,	3 2 2	3 1 4*p.*	
Spring do.,	1 0 0	April,	August and Sept.,	12 stones,	7 barrels,	3 3 4	1 2 4*p.*	Much injured from severe weather some weeks before being cut.
Swedes,	0 2 30	May,	Dec. and January,	4 lbs.,	21¾ tons,	7 9 2	6 18 5*p.*	The expense of cultivation is rather high, the cost of subsoiling and removing a very large quantity of stones being included.
Aberdeens,	0 0 30	July,	November,	4 lbs.,	18 tons,	7 12 6	0 7 6*p.*	
Mangels,* Swedes,	0 3 10	May,	Dec. and January,	(6 lbs. Mangels,) (4 lbs. Swedes,)	21½ tons,	7 6 0	4 9 0*p.*	
Potatoes,	1 1 34	March & April,	October,	80 stones,	3⅗ tons,	8 10 1	3 15 11*p.*	⅛ diseased, included in the produce.
Garden Vegetables,	0 0 10	Different periods,	—	—	—	9 11 4	10 8 8*p.*	

* A mixed crop—the Mangels having failed, I resowed with Swedish turnip and Mangel seeds.

(Signed), JOHN LYNCH, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief.

12th January, 1853. W. F. TIGHE, Manager.

Appendix K.

II. Appendix to Dr. Kirkpatrick's Report.

Kilwaughter Model Farm.

17. Kilwaughter Central Model Agricultural National School, County Antrim.

January, 1853.

Sir,—I beg to submit for your information a Report of my proceedings, in connexion with the Agricultural Department of the above establishment, for the year 1852.

I have now three divisions of the farm cleared of unnecessary fences, and brought into the desired form. No. 1 was ploughed early in autumn, and some portions of it having been cropped with grain several years in succession, was in a very foul and dirty state. It received a second ploughing in March, and remained in this state till the middle of April, when it was harrowed—the weeds carefully collected and carted off. After this treatment, a line of grubbing with a double line of the harrow brought it into a very fine state of pulverization. Afterwards, any weeds that made their appearance having been carted off, it was in a fit state to be drilled. The drills were marked off, and about 25 tons farm-yard manure applied to the acre, care being taken to have it exposed as short a time as possible to the action of the air. I had the work so planned, that the manure put out every day was covered, and sown that evening, at the rate of 4 lbs. seed to the acre; such a quantity insuring a thick braird, and enabling them the better to withstand the attacks of the turnip fly. You will perceive by this, that the crop was put in successively, so that by the time the first day's sowing was thinned the second was ready, thus enabling me to have the entire crop thinned at the proper stage of their growth, an operation which commenced as soon as the young plants had attained about three inches in height. They were thinned by the hand, and left to stand about 12 inches asunder in the drills. The after-management consisted of weeding and loosening the earth between the drills, the latter of which was effectually done by "Gray's two-horse grubber," a most valuable implement, and should not be wanted on any farm cultivated by horse labour. I was enabled, by means of it, to go down from 12 to 14 inches between the drills, allowing free access for the roots of the growing plant into the soil. The crop was grubbed and drill-harrowed twice during the season. The produce fully equalled my expectations, amounting to 26 tons of bulbs, and 2 tons of tops, per statute acre. I sowed two roods of carrots. The variety cultivated was the red Altringham, which I have invariably found to give the largest produce; and it is very valuable as food for horses. I grow them principally for that purpose, as I find the horses improve in condition, and are better able to stand their work when fed partly on them. They were cultivated in drills 2 feet apart, by horse labour, and thinned out to stand from 3 to 6 inches asunder in the drills. About 20 tons of well rotted farm-yard manure were applied to the acre. The produce, to the acre, was 12 tons of roots and 1½ tons of tops—

as much as could be expected, when the nature of the land is taken into account.

Potatoes.—Of these 1½ acres were planted, which was a small quantity compared with former years. The varieties were American apples and cruffles. They were planted early in April, and were attacked by the blight at an early period, which lessened the produce very much. On the whole the crop was much better than last year.

Winter Vetches, 1½ acres.—These were an excellent crop, producing 16½ tons per statute acre. They were much admired by many of the neighbouring farmers, and in two instances they have been sown by others for next year. They were followed by Dale's hybrid turnip, which was sown at different times as the vetches were removed. The produce was 20 tons of bulbs and 5 tons of tops per acre, leaving the full produce, per acre, vetches included, 41½ tons. The remainder of my green crops, for the last year, consisted of 2 roods of mangel wurzel. The land was early ploughed for this crop, and prepared in the same way as for turnips. Fifteen tons of farm-yard manure were applied at the time of sowing. The produce was only 7½ tons. The land on which they were grown was much sheltered, and notwithstanding good cultivation, it is to be seen, from the above return, the influence which the want of air and light has upon our plants. All the green crops which I raised last year, consisting of 10½ statute acres, were manured with farm-yard dung produced on the farm, which shows to what extent they may be cultivated, if people only take proper care of the materials placed within their reach for their production.

No. 2.—I sowed 1½ statute acres of this division with winter Dun oats, at November, at the rate of 12 stones of seed to the acre. Although this is a fully sufficient quantity of seed, yet the crop was thin. The produce was not very great, yet I would recommend its cultivation to a small extent, as it comes in ten days or a fortnight earlier than spring sown oats. You are enabled to meet the earliest market with the produce, you have the ground cleared of the crop in full time to prepare it for the winter vetches, and if thatch has not been provided from the preceding year's crop for your principal corn crop, the straw of the winter dun oats can be made available for that purpose. The remainder of this field was sown with spring oats.

No. 3.—The greater portion of this field was under hay, and the remainder cropped with beans after potatoes, to be followed by oats. The beans were sown in drills 27 inches apart. The weeds were kept down, and the land worked between the drills, the same as advised for green crops. The land after this cultivation is in a remarkably clean state. I squared out this division in last autumn, by levelling two large fences. In the gripe of one of these a pipe was made with stones, 10 inches by 12, as there was a large run of water issuing from the drains of that division. In the gripe of the

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Kilwaughter Model Farm.

other a drain was made, 4 feet deep, and filled with stones to the depth of 12 inches.

No. 4.—This division is yet to be improved, by levelling two fences, which divide it into three fields. I intend having this improvement executed before the end of next season, when the farm will be divided into the desired number of fields. A part of this portion of the farm was cropped with oats, laid down with grass seeds; the remainder was in pasture.

Farm Offices.—During the past summer a great deal of my time was engaged in getting suitable farm offices erected. There is now sufficient accommodation for storing the different crops produced on the farm, which will amount to a considerable saving at the end of the year. The cow-house, which is put up on the most approved principles, and is capable of holding sixteen cows, was completed in August last. The piggeries, five in number, are put up on a cheap plan, at the same time calculated very much to afford convenient accommodation. As the production of green crops insures a large amount of feeding for pigs, I will now be enabled to keep a larger number of them ; and I expect that the profits to be realized from this department will be greater in future.

The pupils constituting the "Agricultural Class," in the Kilwaughter School, continue to make good progress in agricultural education. The "Industrial Class ' continues to give satisfaction.

CRAIGANORNE NATIONAL SCHOOL.

The pupils forming the "Agricultural Class," in this school, have given me great satisfaction during the past year; they have made rapid progress in a knowledge of agricultural subjects.

Agricultural Boarders.—There is but one pupil in this class at present, who was admitted in December last. Of the two who were previously in training here, one returned home, and the other was brought up to Glasnevin.

During the time this establishment has been in existence, there is no doubt but it has contributed, to some extent, towards agricultural improvement in this district. Besides the knowledge obtained by the pupils in attendance at the National Schools where I give instruction, a spirit of emulation has been at work for the last year, each endeavouring to raise the largest crops, and, if possible, to excel those produced on the Model Farm. In one instance, house-feeding has been practised to a limited extent during the last year ; and in another, a neighbouring farmer, after making minute inquiry as to its results, has come to the determination of feeding his cows in the house, at least, for half the time. There is no doubt, when he finds the benefits of such a course, and when his success is made known, it will induce others to follow his example.

I have the honour to remain, Sir, your obedient servant,

JOHN LOCKE, Jun.

Thos. Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

SUMMARY of the Year and BALANCE SHEET for 1852.

Dr.	£	*s.*	*d.*
To Amount of Valuation at commencement of year, .	384	19	0
,, ,, paid for Rent, Taxes, &c., . . .	52	3	4
,, ,, ,, Seeds, Lime, Manure, &c., . .	66	8	5½
,, ,, ,, Cattle during the year, . .	38	12	0
,, ,, ,, Farming Implements and Repairs,	8	6	9
,, ,, ,, Labour, ...	61	18	0½
Value of Gratuitous Labour of Pupils, .	8	0	0
Profit and Loss for balance, being gain on the year, ...	65	17	6½
	£650	5	1½

Cr.	£	*s.*	*d.*
By Amount received for Grain, ...	84	0	3
,, ,, ,, Potatoes, Roots, &c., . .	26	10	0
,, ,, ,, Cattle sold, ...	71	10	6
,, ,, ,, Dairy Produce, . . .	65	3	0½
,, ,, ,, Eggs, Poultry, &c., . .	1	11	4
Amount of Inventory and Valuation taken at close of year, inclusive of proportion of unexhausted improvements, ...	401	10	0
	£650	5	1½

Table showing the Cropping of the Kilwaughter Central Model National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Turnips, Swede,	5 2 0	24th May till 4th June,	—	4 lbs.,	26 tons,	8 0 0	5 0 0*p.*	
,, Delo Hybrid,	2 2 0	12th June till 24th July,	December,	4 lbs.,	20 tons,	7 0 0	0 10 0*p.*	
Mangel,	0 2 0	Last week in April,	November,	6 lbs.,	15 tons,	7 0 0	6 5 0*p.*	
Carrots,	0 2 0	1st week in April,	November,	6 lbs.,	12 tons,	8 0 0	16 0 0*p.*	
Potatoes,	1 2 0	1st week in April,	November,	12 cwts. 2qrs.,	3 tons,	9 0 0	3 0 0*p.*	
					cwt. qrs. lbs.			
Oats,	8 2 0	March,	September,	8 stones,	18 0 24	4 0 0	1 9 4*p.*	
Winter Dun Oats,	1 2 0	November,	August,	12 stones,	16 1 21	4 0 0	0 18 4*p.*	
Oats,	4 0 0	April,	September,	7 stones,	18 0 24	4 0 0	1 9 4*p.*	
Oats,	2 0 0	April,	September,	10 stones,	18 0 24	4 0 0	1 9 4*p.*	
Flax,	1 0 0	April,	August,	2½ lbs.,	—	6 0 0	2 0 0*p.*	The flax crop is not manufactured yet; I believe it will exceed the valuation.
Beans,	2 0 0	March,	September,	16 stones,	23 0 0	5 0 0	2 19 6*p.*	
Spring Vetches,	2 0 0	March,	July,	2½ lbs.,	12 tons,	4 0 1½	0 15 10½	
Hay,	7 0 0	—	July,	2 lbs. of grass seed, & 7 lbs. of clover,	2 tons,	2 11 5	1 8 7	
Cabbage,	0 2 0	August,	May,	—	26½ tons,	—	—	The vetches and cabbages are not taken into account, as they were used by stock, the profits of which are given.
Winter Vetches,	1 2 0	October,	June,	2½ bshls. and 1 of rye,	16½ tons,	—	—	
Pasture,	5 2 0	—	—	—	—	—	—	

(Signed), John Locke, Jun., Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

8th February, 1853. Classon Porter, Manager.

18. Larne Model Farm.

1st January, 1853.

Sir,—In submitting to you my Fifth Annual Report on the Larne Agricultural School and Model Farm, I am happy in being able to state that agricultural education and improvement are still continuing to make steady and substantial progress in this neighbourhood, and are producing important and gratifying results. Green crops are extensively, and, in many cases, most successfully cultivated; the growth of flax is steadily progressing; clover, rye-grass, and vetches are beginning to find a place on almost every farm; winter ploughing is becoming quite general; cattle are more carefully selected with regard to their feeding and milking properties, and are more generously and judiciously managed than heretofore; the labouring population find constant and remunerative employment; the agricultural interest is rapidly recovering from the depression of the past years; and the general aspect of the country shows that the hour of Ireland's misery is past, and that the star of her prosperity is again in the ascendant, and is shedding its benign influence over the land.

The School and Model Farm are successfully carrying out the objects for which they were established. The instruction imparted to the youth of the district; the example of systematic husbandry afforded by the Model Farm; and the advantages of this system manifested in the production of crops in many instances greater than were ever before raised in the neighbourhood, are producing the most beneficial effects on the agriculture of the adjoining farms, and creating a decided taste for order, neatness, and efficiency in farm management. The opportunities afforded to the deserving pupils of this establishment of getting forward in the world, and reaping the reward of industry, application, and intelligence, have already produced results in the development of talent that have been *publicly acknowledged and publicly rewarded.* During the past few years nineteen young men (some of them from the labouring class) obtained situations in most cases of much public usefulness and responsibility, which enables them to bring comfort and happiness to their own families, and, as agents of "Industrial Progress," to spread the blessings of education on every side, and sow the seeds of a harvest that will yet be realized in the improved industrial prosperity of the country, and the increased social happiness of its inhabitants.

The work of the Model Farm was performed partly by the plough and partly by the spade. The cost of a plough and three horses was 12*s.* a day, with dinner and some beer to the ploughman. It took three days to plough an Irish acre of one year old lea. A stout labourer would dig the same quantity of ground to the depth of eight or ten inches in about sixty days. I have always paid labouring men the highest wages in the neighbourhood, 15*d.* a day, and I am satisfied

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Larne Model Farm.

that, considering the superior quality of the work performed by the spade, as a matter of calculation and profit that it was my interest to do so. The men to whom I paid the above rate of wages always worked with energy, carefulness, and honesty, and rendered an ample equivalent in labour for the wages they received.

From returns published in the Journal of the "Royal Agricultural Improvement Society of Ireland," it appears that the average wages of labouring men in different counties of Ireland last year was as follows :—

	d.	d.			d.	d.	
Antrim,	from 10	to 15	per day.	Meath,	,, 6	,, 12	per day.
Down,	,, 10	,, 14	,,	King's Co.	,, 5	,, 10	,,
Londonderry,	,, 12	,, 20	,,	Waterford,	,, 8	,, 10	,,
Cavan,	,, 8	,, 10	,,	Wexford,	,, 6	,, 10	,,
Tyrone,	,, 8	,, 10	,,	Cork,	,, 8	,, 0	,,
Mayo,	,, 8	,, 10	,,	,, (Skibbereen)	5	,, 8	,,
Tipperary,	,, 8	,, 10	,,	Clare,	,, 6	,, 8	,,
Galway,	,, 7	,, 8	,,				

In those districts where wages are so very low, if each of the men were allowed a pound of beef daily in addition, I am strongly of opinion that the result would be mutually satisfactory to the employer and the employed. When labourers are substantially fed and comfortably clothed, they are able to perform a greater amount of work than if badly supplied with these necessaries. They are able to continue at work and to support their families for a greater number of years, and there is not, therefore, the same likelihood of them becoming burdens on the country in their old age. They are not so exposed to those temptations or crimes which poverty in some cases leads to, nor are they liable to those numerous diseases which an insufficiency of nutritious food invariably engenders.

To elevate the condition of the labouring class in social comfort and mental enlightenment is the surest means of promoting the peace, happiness, and permanent prosperity of the country; and this is a part of their mission, which, I trust, the National Agricultural Schools will persevere in successfully accomplishing.

There was an increased area of the farm under "green crops" last year, and a corresponding decrease in the breadth of corn. This change was rendered necessary by the low price of grain and the steady demand existing here for turnips and mangel, the former at 15*s.*, and the latter at 20*s.* a ton, prices much greater than could be obtained by consuming these crops on the farm. I am well aware that it is bad management to sell the green crops, unless a full equivalent of manure for that which would be produced by their consumption on the farm is purchased in lieu of them; but this farm is on the verge of the town, manure can be purchased cheaper than it could be produced on the premises; and as I find that, by adopting this course, I can as efficiently main-

tain the fertility of my farm, and realize a much greater profit, I conceive I am strictly fulfilling the requirements of "the best system of farming;" but, of course, I do not put forward my practice in this respect as a *model* for imitation, unless where the local circumstances may be similar.

The "Table of Cropping" appended to this Report will show the different kinds and proportions of crops cultivated last year. The ground was deeply tilled, and well manured; seeds of the best quality were sown in good time; and the after-culture subsequently attended to with as much care as a due regard to economy would permit. The returns, generally, were much above the average of the country.

The potato crop suffered severely from the disease, which was of a very malignant character in this neighbourhood; only about one-third of my crop was fit for use. It is said that it was of a much more virulent character on every variety of soil where the seed had not been changed for a few years than where the crop was grown from seed recently introduced.

I grew a plot of beet, for the purpose of ascertaining the produce as compared with mangel. It was sown early in May, in drills two feet apart. The plants on one portion were allowed to stand 12 inches, and on the other 6 inches asunder. The weight of the former was 35 tons to the acre; the latter was not weighed, as most of the plants ran to seed.

Beans were sown in drills 30 inches apart. In June, cabbage plants were carefully put in between the rows, and well manured with sea-weed. After the bean crop was removed in the autumn, the cabbages were sold at the rate of £12 the acre.

Flax was sowed on wheat-stubble, ploughed in the autumn, lightly turned over again in the spring, and well pulverized and consolidated, by the use of the harrow and roller, before sowing the seed. The seed was sown on the 19th of March, being about a month earlier than the usual time of sowing. The crop was greatly admired for its length and fineness of fibre. The following notice of it appeared in the *Farmer's Gazette* of the 19th of June:—"A very superior sample of flax, grown on the Larne Model Farm, has been forwarded to this office, where it lies for inspection. The seed was sown on the 19th March, and the sample pulled on the 14th inst. It measures three feet, and we calculate that before pulling time, from six to nine inches will be added to its length. The sample promises to yield a very fine fibre. So much for early sowing." It was pulled early in July, leaving ample time to put in a crop of late turnips, cabbages, or rape. In the previous year, I sowed turnips after flax, in August. The crop continued growing till after Christmas, when it yielded 22 tons to the acre. Last year the flax ground was sown with cabbage seeds.

Flax is coming into general cultivation in this part of the

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Larne Model Farm.

country; and now that an excellent flax-mill has been erected by Mr. Agnew, at Kilwaughter, it may be expected that its growth will be widely extended, and that it will become a staple article of produce in the neighbourhood. In the present circumstances of the country, where facilities exist for preparing the fibre for market, there are, perhaps, few other crops can be grown with a greater certainty of profit, or a quicker return of expenditure, than flax; but, to be really profitable to the grower, it must be steeped and scutched by him. The amount received for the clean fibre is generally *double*, and in some cases *treble* the price offered for the flax *in the green state*.

The saving of the seed is a question of considerable importance; but there are so many difficulties to be overcome before seed can be profitably saved in this country, that it is not surprising that so little attention has hitherto been paid to this subject.

The manner in which seed fit for sowing is usually obtained is by allowing the flax, after being pulled, to remain in the field till it is quite dry and seasoned, and then to separate the seed from the straw by the ripple, hand-flail, or threshing machine, or by lashing it over a barrel, in the same manner as wheat is lashed. By this procedure the yield of fibre is so much diminished, and its quality so deteriorated, that the amount of seed obtained is hardly an equivalent for the injury done to the fibre.

When the seed is intended only for cattle feeding, it is rippled from the flax in its green state, immediately after the crop is pulled; but the difficulty of drying this green seed is so great, in consequence of our precarious climate, the scanty accommodation in the way of floors and lofts at our farm-buildings, and the aversion which millers have to either dry or grind it, that it is frequently attended with much trouble, vexation, and disappointment, and consequently many extensive flax growers have given up the saving of the seed. I do not make these observations to discourage the saving of seed, but to place the question in its proper position before the public.

The live stock continue to be house-fed with an abundance of the best food, and to be kept as clean, comfortable, and airy as circumstances will permit.

I received, within the year, £23 8*s.* for pigs, sufficient evidence that this important branch of husbandry receives a due share of attention.

Many strangers visited the establishment during the year. From their reports, which were most gratifying, I beg to submit the following:—

1852, July 27th.—"Visited this school, and examined two classes—one in English Parsing and the Elements of Mechanics, the other in Arithmetic and Geography. The answering was excellent, and, in my opinion, reflects the highest credit

on the zeal and ability of the Teachers, as well as on the diligence of the Pupils. No school could be more orderly, or apparently in a better state of discipline and efficiency, than this appeared to me to be.

"J. SCOTT PORTER,
"Presbyterian Minister and Profes. Theol."

Before concluding this Report, I beg most respectfully to call your attention to the importance of establishing a library in the Larne School, and of supplying the establishment with a set of mathematical instruments. I have hitherto done all in my power to supply the wants of the Institution in these particulars, but my own means were entirely inadequate to the attainment of so desirable an object. I have, however, purchased several pounds' worth of agricultural and scientific books, and taken in the agricultural papers, periodicals, and reports of scientific bodies published in this country. I have also procured sufficient apparatus to exemplify and test the properties of soils, manures, salts, acids, gases, &c., and a considerable collection of those mineral and organic substances usually treated of in agricultural chemistry. With these, together with about *three hundred* specimens of the rocks, minerals, and fossils of the country, and tables of the composition of rocks, soils, manures, and crops, printed on large sheets of calico, suspended in the schoolroom, aided by the geological map of Ireland, and the valuable collection of specimens which you kindly presented to the school four years ago, we have been able to get on pretty well; but of course the result would have been more satisfactory had our means been in any degree commensurate with our necessities.

In conclusion, considering the difficulties which the extension of agricultural education has had to contend with during the past years, owing to the poverty of the people, the depressed condition of the landed proprietors, and the unsettled state of the "land question;" and also that the beneficial effects of all education is not immediate, but future; and looking at what it has accomplished—the hold it has taken on the community, without distinction of class or creed, the impetus it is giving to agriculture, the number of skilful labourers it is producing, the young men it is putting forward, and the thirst it is creating for progress and improvement—it must be concluded that, when extended and developed, it will be a powerful instrument in promoting the social and physical advancement of the people.

I beg to conclude this Report by quoting the words of one of our most gifted countrymen, in reference to agricultural education:—"Vast in its consequences, it is yet simple in its means of attainment. It only requires that each man intending to live by the land should know what the land is, and what can be done with it. That having so learned, he

APPENDIX K.

II. Appendix to Dr. Kirkpatrick'sReport.

Larne Model Farm.

should apply himself steadfastly to the practical working of his occupation. So, he is certain of success; success will render him independent, independence will render him respected, and respect will bring him power. Thus knowledge is power—*practical* knowledge—for power is essentially practical."

I have the honour to be, Sir, your faithful servant,

JAS. MACDONNELL.

Thos. Kirkpatrick, M.D.,
Inspector of National
Agricultural Schools.

SUMMARY of the Year and BALANCE SHEET.

Dr.	£	*s.*	*d.*	*Cr.*	£	*s.*	*d.*
To Amount of Valuation at commencement of year, .	80	9	0	By Amount received for Potatoes, Roots, &c., . .	11	18	3½
,, ,, paid for Rent, Taxes, &c., . . .	20	18	0	,, ,, ,, Cattle sold, ...	32	5	6
,, ,, ,, Seed, Lime, Manure, &c., . .	6	19	4	,, ,, ,, Dairy Produce, . . .	23	16	5½
,, ,, ,, Cattle during year, . . .	17	4	6	,, ,, ,, Poultry, ...	0	12	0
,, ,, ,, New Farming Implements, . .	1	1	0	Amount of Inventory and Valuation taken at close of year, inclusive of proportion of unexhausted improvements, ...	120	5	0
,, ,, ,, Labour, ...	22	6	11				
,, ,, Gratuitous Labour of Pupils, . . .	10	0	0				
,, ,, Profit and Loss, being gain on year, . .	29	18	6				
	£188	17	3		£188	17	3

TABLE showing the CROPPING of the Larne Model Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Turnips,	2 0 0	Early in May,	November and Dec.,	3 lbs.,	36 tns. 16cwt.	14 0 0	10 0 0*p.*	The turnips when stored are very fine; the bulbs are nearly all of the same size, and beautifully formed.
Mangel,	0 3 0	End of April,	November,	4 lbs.,	36 tns. 18cwt.	16 0 0	12 0 0*p.*	
Carrots,	0 0 16	End of March,	October and Nov.,	6 lbs.,	19 tns. 15cwt.	16 0 0	12 0 0*p.*	
Sugar Beet,	0 0 4	Early in May,	November,	4 lbs.,	21 tns. 12cwt.	0 16 0	—	
Potatoes,	0 3 0	January,	End of October,	13 cwt.,	Two-thirds diseased, 27 tns. 6 cwt.	17 0 0	12 0 0*l.*	The mangel suffered severely, in the early part of the season, from snails. Three boys collected upwards of 1,800 of them from twenty perches of ground in the course of a few hours. Afterwards the crop progressed admirably.
Cabbages,	0 0 4	Sept. and March,	—	—		17 0 0	2 0 0*p.*	
Flax,	0 0 16	19th March,	Early in July.	9 pecks,	35 stones,	10 0 0	2 10 0*p.*	
Oats,	0 1 20	10th March,	August,	10 stones,	24 cwt.	6 0 0	4 0 0*p.*	
Grass,	1 1 7	April,	—	—	24 tons,	5 10 0	4 10 0*p.*	
Beans,	0 0 30	Early in March,	August,	1½ cwt.,	23 cwt.	8 0 0	2 0 0*p.*	
Vetches,	0 3 0	September,	—	3 bushels,	16 tons,	7 10 0	3 0 0*p.*	
Rape,	0 0 7	Early in Sept.,	—	—	15 tns. 9 cwt.	—	—	
Cabbages after Vetches,	0 1 0	June and July,	—	—	20 tons,	—	—	
Turnips after Vetches,	0 2 0	June and July,	—	—	16 tns. 13cwt.	10 0 0	4 10 0*p.*	The estimated expense of cultivating cabbage seems high. It includes £2 for rent, £2 for plants, £6 for manure, and £6 for labour.
Mangel after Rape,	0 0 7	June and July,	—	—	19 tns. 15cwt.	11 0 0	5 0 0*p.*	
Cabbages with Beans,	0 0 30	June and July,	—	—	Sold for £12 per acre,	8 0 0	4 0 0*p.*	
Cabbage Plants after Flax	0 0 16	July and August,	—	10 lbs.,	—	—	—	
Total,	6 2 37							

(Signed), JAMES MACDONNELL, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

CHARLES WARD, Manager.

8th January, 1853.

19. MODEL FARM, Markethill.

15th December, 1852.

SIR,—I beg to submit to you my Report and balance-sheet for the year ended the 31st of October, 1852.

Permanent Improvements effected during the year.—As was stated in my Report for '51, the additions lately made to the farm required a considerable amount of permanent improvements before they could be profitably brought into a fit state for carrying out a regular system of cropping. In order, therefore, to carry out my views in this respect as speedily as possible, I commenced early in November, '51, to remove all the interior and useless fences, and to thorough drain the portions that stood most in need of such improvement. These operations continued without interruption, unless in very severe weather, until the middle of March, when the thorough drainage of four acres, two roods, and twelve perches, the levelling and removing of useless fences, and the filling-in of old gripes, over an area of five and a half acres, were completed. The materials used for the construction of the drains were stones broken to the size that would pass through a three-inch ring, which were filled in to the depth of ten inches in the parallel, and fourteen inches in main drains. The opening of the drains, breaking of the stones (which were principally obtained from the sites of the old fences), filling-in, and closing, were done by contract; and sufficient care was taken that the labourers performed their work in a careful and efficient manner. I may add, that during the season in which these several operations were performed, there was a surplus of unemployed labour in this neighbourhood, in consequence of which I was enabled to get the work done at a very moderate expense, and in due season for such crops as were then to be sown on the land so drained.

I will endeavour to explain in a more concise manner the relative operations connected with these permanent improvements, by the following table:—

Area drained.	Denomination of Drains.	Statute Perches.	Depth in Feet.	Distance apart in Feet.	Materials used.	Average rate per perch.	Total Expenses.
						d.	£ s. *d.*
A. R. P. 4 2 12	Main Drains.	18	4	–	Masonry pipe	13	0 19 6
		15	3¾	–	Broken stones.	8	0 10 0
		11	3½	–	Do.	7½	0 6 10½
	Parallel Drains.	28	3	21	Do.	5½	0 12 10
		127	3½	30	Do.	7½	3 19 4½
		160	3½	26	Do.	7½	5 0 0
							4 11 8 7
Levelling interior fences, and filling in old gripes, on an area of 5A. 2R.,		189 perches,					4 14 6
	Total,						£16 3 1

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Markethill Model Farm.

Of this sum, Lord Gosford, through his agent, William Wann, Esq., was pleased to refund me £9, for which I am to pay at the rate of five per cent. interest as an additional rent. It is worthy of remark, that, on an area of five and a half acres, three roods and six square perches have been gained, by the levelling of 189 perches of useless interior fences, and the filling up of the old gripes in connexion with them, thus showing the great loss the generality of small farmers annually sustain by permitting their farms to be intersected by such irregular, useless, and frequently injurious fences. The limits assigned to this Report will not permit me to discuss in detail the many inducements the farmer, who has the necessary means at his disposal, would find for effecting improvements of this description on his farm. At all events, I conceive it to be my duty to submit these facts for consideration, by simply stating my own practice in these cases, and the results arising therefrom.

In addition to the permanent improvements already stated, I commenced early in May, after the spring labour on the farm had been got through, to build additional farm offices, consisting of an enlargement of the cow-house, a new stable, and harness-room ; also the removal of the site or pit for the manure to a more central position ; the building boundary-walls round the stack-yard, suitable for hay and bean-hovels, cart and plough-sheds, &c. ; all of which were indispensably necessary, on account of the increased size of the farm. The improvements in connexion with the farm offices and stack-yard are not yet entirely finished ; and, in consequence, I have not inserted in this year's accounts the sum already expended on these buildings ; but when the whole of the improvements are completed, the outlay shall be included in the accounts of the ensuing year's transactions.

The cost already incurred in the execution of these improvements, independent of the assistance rendered by the agricultural pupils, and the carting of building materials (the value of which has not been calculated), amounts to £21. Of this sum Lord Gosford has been pleased to contribute £6, for which I have reason to feel very grateful, especially as the sum of £400 was originally expended in building this establishment, the entire of which was contributed by his lordship.

Contents of Farm.—Rotations.—The farm contains an area of 18A. 1R. 7P., statute measure, on which a three and a six-course rotation are intended to be followed, these being considered best adapted to the peculiarities of the soil, &c. The three-crop rotation is to be pursued on a detached part of the farm, containing 3A. 3R. 12P., and the order of succession will be the following : 1st, beans, manured ; 2nd, wheat, with grass and clover seeds ; 3rd, grass, for soiling. Thus, one-third will be manured each year ; and as the soil is of a very tenacious character, and has been exhausted by improper management, it has been considered that this order of rotation is the best that could well be adopted under the present circumstances. On the re-

maining portion, containing 14A. 1R. 35P., a six-crop rotation is to be followed, in the following order :—1st, green crops ; 2nd, oats or barley, with grass-seeds ; 3rd, grass, for soiling ; 4th, grass second year ; 5th, oats or wheat ; 6th, flax and spring vetches. These arrangements I was unable to have completed with the past year's cropping, owing to the many obstacles and disadvantages I have had to encounter, consequent on the irregular mode of tillage pursued by the previous occupant. These disadvantages are now almost removed, and I expect the ensuing year to be able to establish fully the order of rotations mentioned above. I may add, that I have had considerable trouble in forming the arrangement for the order of cropping already alluded to, from the circumstance, that on the original school-farm, a "seven-course" rotation was followed ; and it has been my object to combine it with the other portion, lately added, so as that the whole can be worked under the "six-course shift," already mentioned.

As I have furnished a statement, annexed to this report, of the various crops grown on this farm during the past year, I consider it unnecessary, at present, to occupy your attention with the details in reference to the mode of culture pursued, and the amount of produce raised, as I have been careful to supply all the information I possibly could in a condensed form, relative to these matters in the table referred to.

Experiments.—Being anxious to ascertain the comparative results that might be obtained from the cultivation of mangel wurzel and sugar-beet, when grown under similar circumstances of soil, quantity, and quality of manures, and after-culture, also, the relative returns, when grown at different distances apart, I had some experiments carried out during the past year, the results of which I now beg leave to submit.

The ground on which these crops were grown had previously borne a winter crop of transplanted rape, which got a supply of about 14 tons per acre of farm-yard manure, at the time (October, '51) the rape was planted ; and as this crop was being used in April last, the ground was dug 12 inches deep, and immediately afterwards prepared for these crops in the usual way. The drills were opened 28 inches asunder, into which well-prepared farm-yard manure was put, at the rate of 15 tons per statute acre, and, immediately before closing the drills, Peruvian guano and vitriolized bone compound were spread over the manure in the drills alternately, at the rate of $2\frac{1}{2}$ cwts. of the former, and 3 cwts. of the latter per statute acre. These operations were finished the second week in May, and in the third week the mangel and sugar-beet seeds were dibbled in. The mangel plants, when finally thinned out, stood 12 inches apart in the rows ; the plants on 3 square perches under sugar-beet stood at the same distance apart, and on the remaining 3 perches of the beet, the plants stood only

6 inches apart in the rows, but the drills were 29 inches asunder. I could not perceive any material difference in the forcing properties of the guano and bone compound during the first stages of the growth of the plants, nor in the weight of the crops when lifted. I should have stated that the variety of mangel wurzel cultivated in the experiment was the yellow globe.

The crops, when taken up on the 6th of November last, weighed respectively per statute acre—

	Tons. cwts. qrs.	Tons. cwts. qrs.	Distance asunder of plants.
Mangels,	. 29 0 0 roots .	7 8 0 tops .	28 in. by 12 in.
No. 1 Sugar Beet,	23 6 0 roots .	13 7 0 tops .	28 in. by 12 in.
No. 2 Sugar Beet,	30 0 0 roots .	23 0 0 tops .	29 in. by 6 in.

These returns are not so large, I admit, as are sometimes obtained from crops of this description, but at the same time I think a very important practical hint may be deduced from this experiment—namely, the increased amount of produce realized from the portion on which the plants stood at the distance of 6 inches apart in the rows over that on which the plants stood 12 inches asunder, although it has hitherto been our practice, in order to obtain a weighty produce, to grow such crops not less than 1 foot apart. Besides, those grown at the shorter distance seem to me to be more solid, and, I have no doubt, contain more nutritive matter than the others, weight for weight.

Farm Stock.—It will be found, by a reference to the "Statistical Returns," that the stock kept during the year has not increased proportionately with that of the farm. This arose principally from the very limited supply of grass obtained during the summer months from a part of the additions lately made; and as the soil of this portion was in a very exhausted state, I thought it more judicious to have such of it as was under grass used for pasture, which was of a very poor description.

As the principal source of profit in connexion with the farm has arisen from the keep of dairy stock, my attention has always been directed, in an especial manner, to the selection of the best breeds of cows within my reach, the most economical mode of house-feeding, and the rearing of young stock; and I feel pleasure in being enabled to state, that the results arising from anxious care and attention in these respects have, for so far, been very successful.

During the summer months, the system pursued has been partly house-feeding and partly grazing; in the winter season house-feeding has been exclusively followed.

Before entering on the details of house-feeding, as at present practised here, I think it necessary to state that formerly three feeds of turnips, of 28 lbs. or 30 lbs. each, were given each day, at regular intervals, alternating with three of oat-straw or hay. The present practice is, that each milch cow gets

only two feeds of turnips and one of mashed compound each day, with the usual hay or oat-straw feeds between. The compound is made from beanmeal, ground flax bolls, oatmeal seeds, and chaff or cut hay, in the following quantities :— 17 lbs. of beanmeal, 9 lbs. of flax bolls, and 12 lbs. of oatmeal seeds, to 20 gallons of water ; and when the whole has boiled for some time, oat-chaff or cut hay is mixed with it until the entire becomes quite thick. In this state it remains in the boiler for 7 or 8 hours, when it is removed to a large tub, in order to have it sufficiently cold before being given. Each cow gets about 18 lbs. of this compound at a feed.

I am enabled to state that the change in the system of house-feeding, by diminishing the quantity of raw turnips, and *substituting cooked food*, has been productive of very favourable results, in the more healthy condition and improved milking qualities of the dairy stock ; and I am fully satisfied that, independent of these advantages, the saving of turnips alone by this mode of feeding, throughout the season, more than compensates for the additional cost arising from fuel and attendance.

School Department.—The applications for admission from Boarding Pupils have not been so numerous during the past as in former years, owing to the increased number of similar establishments throughout the country. Appended to this Report is a list of agricultural pupils who have been in training at this school during the past year, from which it will be seen that the greater number are from this and the neighbouring localities, a circumstance that is calculated to show an increased interest in the progress of combined literary and agricultural instruction amongst the farming community of this district.

The pupils here have had an opportunity of acquiring a considerable amount of practical knowledge during the past year, in the system of thorough drainage, the arrangement of the farm divisions for the rotations intended to be followed, and in the planning and construction of farm-offices, in all of which they took an active part.

As I have furnished in my former Reports an account of the time occupied in imparting instructions in the theory and practice of agriculture, I deem it unnecessary to detain you at present by any reference to this subject, as no alterations have been made for this purpose in our "Time Table." It only remains now for me to state, that the progress made during the past year by the members of this class, both in their literary and agricultural studies, has been very satisfactory.

I had occasion, last year, to report favourably respecting the "Industrial Class," and the earnest desire evinced by the parents in having their sons admitted when vacancies occur. From the result of another year's experience of its working, I feel great pleasure in being enabled to confirm my former statements respecting the steady progress the members composing

this class continue to make, both in literary and agricultural education. Its formation in this school has been the principal means in removing, to a great extent, the prejudice hitherto entertained by the parents against allowing their children to take an active part in the cultivation of the farm. The good effects arising from its establishment are already apparent, and I trust I shall be able, hereafter, to add additional testimony of its efficiency, and the good it is capable of accomplishing.

In conclusion, I beg to state that I have been much assisted in the discharge of my duties in the school-room by the energy and zealous co-operation of the Assistant Teacher, Mr. Delany, who has given general satisfaction in the performance of his duties.

I have the honour to be, Sir, your obedient servant,

PATRICK O'HAGAN.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

BALANCE SHEET of the Markethill Model Farm, for the Year ending 31st October, 1852.

Dr. EXPENDITURE.	£	s.	d.
To Amount of Valuation at commencement of year,	136	7	2
,, paid for Rent and Taxes for the year,	28	3	6½
,, paid for Labour during the year,	20	17	5½
,, paid for Manure, Lime, and Seeds,	19	16	1½
,, paid for Cattle bought for the year,	31	13	9½
,, paid for Implements and Repairs,	8	16	1½
,, for Free Labour from Agricultural Pupils,	6	18	0
To Profit and Loss for balance, being gain for the year,	40	5	9½
	£292	18	0

RECEIPTS. *Cr.*	£	s.	d.
By amount received for Grain sold,	11	12	6
,, Roots sold,	2	10	3
,, Cattle sold,	28	11	5
,, Dairy produce,	28	5	7
,, Poultry and Eggs,	1	16	5
,, Dairy and Farm produce used by family,	27	16	1
By amount of Valuation at close of the year,	192	5	9
	£292	18	0

Weight per Statute Acre, of Crops grown on the Markethill Model Farm, during the year 1852, with the Valuation at the current prices in the neighbourhood.

	Extent.	Gross Produce.	Gross Value.	Acreable Produce.	Acreable Value.	Gross Cost.	Acreable Cost.	Gross Gain.	Acreable Gain.	Observations.
	A. R. P.	tons cwt. qr.	£ s. d.	tons cwt. qr.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
Winter Vetches,	0 3 0	11 12 3	5 16 0	15 10 1	7 15 0	3 4 3	4 5 8	2 11 9	3 9 4	Stolen crop, succeeded by Turnips.
Oats,	7 3 26	6 7 0	36 10 3	0 16 0	4 12 0	30 4 5	3 16 5	15 15 6	1 19 7	The gross cost here does not include the expense incurred in preparing the grain for market.
Do. straw,	—	14 4 2	9 9 8	1 16 0	1 4 0					
Flax,	0 3 30	29 stones,	10 17 6	31 stones,	11 12 6	6 5 7	6 14 0	4 11 11	4 18 6	
Mangels,	0 1 0	7 5 0	6 0 10	29 0 0	24 3 4	2 14 5	10 17 11	3 6 5	13 5 5	
Do. tops,	—	1 17 0	—	7 8 0	—	—	—	—	—	
1 Sugar-Beet,	0 0 3	0 8 3	0 8 9	23 6 2	23 6 6	0 4 0	10 17 11	0 4 9	12 8 7	Sugar-Beet, No. 1, width of drills, 28 in.; plants 12 inches apart in the rows.
Do. tops,	—	0 5 0	—	13 7 0	—	—	—	—	—	
2 Sugar-Beet,	0 0 3	0 11 1	0 11 3	30 0 0	30 0 0	0 4 0	10 17 11	0 7 3	19 2 1	No. 2, width of drills, 29 inches; plants 6 inches apart in the rows.
Do. tops,	—	0 8 1	—	22 0 0	—	—	—	—	—	
Turnips,	0 3 11	19 0 3	9 10 0	23 5 3	11 12 6	7 0 9	8 12 0	2 9 3	3 0 6	
Do. tops,	—	6 15 0	—	8 4 0	—	—	—	—	—	
Carrots,	0 0 25	1 19 0	2 16 8	12 9 2	18 14 3	1 14 0	10 17 11	1 4 6	7 16 4	
Potatoes,	0 3 2	2 5 0	5 12 6	2 19 0	7 7 6	5 19 5	7 16 8	0 6 11	0 9 2	Loss.
Beans,	1 1 4	52 bushs.,	13 0 0	41 bushs.,	10 5 0	8 5 9	6 10 0	4 14 3	3 15 0	
Italian Rye-grass,	1 3 0	31 12 0 (2 cuttings).	21 1 4	18 1 0	12 0 8	4 8 4	2 10 6	16 13 0	9 10 2	
Pasture,	2 3 0	—	6 17 6	—	2 10 0	5 0 4	1 16 6	1 17 2	0 13 6	
Under cultivation,	16 2 24		128 14 1			75 5 3		53 15 9		
Under Farm-steading, roads, and fences,	1 2 23							0 6 11	Loss.	
Total,	18 1 7							53 8 10		

Note.—There is an amount of 9*s.* 10½*d.* incidental expenses incurred in the cultivation, which has not been distributed over the various crops in the calculation given above. This sum when added to the gross cost as is shown in the Table, will give £75 15*s.* 1½*d.*, the total gross cost; and when taken from £53 8*s.* 10*d.*, will give £52 18*s.* 11½*d.*, the total gross gain.

A LIST of AGRICULTURAL PUPILS who have been in TRAINING at the Markethill Model Agricultural School during the year 1852.

Names.	Date of Admission.	Age.	Where from.	By whom recommended.	County in which Patron resides.	Date of leaving.	Removed to.	Present Occupation.
Arthur Murphy,	Feb., 1850,	15	Kilbracks,	Joseph M'Kee, Esq.,	Armagh,	—	—	Yet in training.
David Marshall,	,,	16	Enagh,	,,	,,	Jan., 1852,	Home,	Engaged on his father's property.
John Hughes,	June, 1850,	17	Dublin,	C. K. Clarke, Esq.,	Yorkshire,	May, 1852,	Glasnevin,	—
James Hanlon,	,,	15	Markethill,	Joseph M'Kee, Esq.,	Armagh,	—	—	Yet in training.
Joseph Hughes,	August, 1850,	15	Mowhan,	,,	,,	—	—	,,
John Sheals,	Nov., 1850,	14	Markethill,	,,	,,	—	—	,,
William Hughes,	,,	12	Corhamock,	,,	,,	—	—	,,
Thomas Doyle,	March, 1851,	16	Dublin,	Lady Gosford,	,,	May, 1852,	Glasnevin,	—
David O'Connor,	Nov., 1851,	19	Cappoquin.	Sir R. Musgrave.	Waterford,	June, 1852,	,,	—
Patrick Toner,	Jan., 1852,	16	Markethill,	Joseph M'Kee, Esq.,	Armagh,	—	—	Yet in training.
Archibald Armstrong,	April, 1852,	17	,,	,,	,,	Sept., 1852,	Not known,	Not known.
Francis Mulligan,	,,	15	,,	,,	,,	Oct., 1852,	Liverpool,	,,
Miles M'Cane,	August, 1852,	14	Mowhan,	,,	,,	—	—	Yet in training.
Patrick Murphy,	,,	12	Markethill,	,,	,,	—	—	,,
John Boyd,	,,	15	,,	,,	,,	Nov., 1852,	Home,	Sadler's apprentice.
James Wilson,	Sept., 1852.	17	,,	,,	,,	—	—	Yet in training.
Robert M'Elroy,	,,	12	,,	,,	,,	—	—	,,

TABLE showing the CROPPING of the Markethill Model Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.				tons cwts. qrs.	£ s. d.	£ s. d.	
Winter Vetches,	0 3 0	2nd week in Oct.,	May and June,	3 bushels,	15 10 1	4 5 8	3 9 4*p.*	Stolen crop succeeded by turnips.
Oats,	7 3 26	3rd & 4th weeks in March,	1st & 2nd weeks in September,	10 stones,	0 16 0	3 16 5	1 19 7*p.*	
Do., Straw,	—	—	—	—	1 16 0	—	—	
Flax,	0 3 30	2nd week in April,	1st week in August,	2½ bushels,	31 stones,	6 14 0	4 18 6*p.*	Flax, mill-dressed.
Mangels,	0 1 0	2nd week in May,	1st week in Nov.,	5 lbs.,	29 0 0	10 17 11	13 5 5*p.*	
Do. Tops,	—	—	—	—	7 8 0	—	—	
1. Sugar-Beet,	0 0 3	3rd week in May,	1st week in Nov.,	5 lbs.,	23 6 2	10 17 11	12 8 7*p.*	Sugar-Beet, No. 1. drills twenty-eight inches asunder, plants twelve inches apart in the rows. No. 2 drills twenty-nine inches asunder, plants six inches apart in the rows.
Do. Do., Tops,	—	—	—	—	13 7 0	—	—	
2. Sugar-Beet,	0 0 3	3rd week in May,	1st week in Nov.,	5 lbs.,	30 0 0	10 17 11	19 2 1*p.*	
Do. Do., Tops,	—	—	—	—	22 0 0	—	—	
Turnips,	0 3 11	4th week in June, and 1st week in July,	Yet in field,	4 lbs.,	23 5 3	8 12 0	3 0 6*p.*	
Do. Tops,	—	—	—	—	8 4 0	—	—	
Carrots,	0 0 25	3rd week in May,	1st week in Nov.	2½ lbs.,	12 9 2	10 17 11	7 16 4*p.*	
Potatoes,	0 3 2	1st week in April,	4th week in October,	10½ cwts.	2 19 0	7 16 8	0 9 2*l.*	
Beans,	1 1 4	1st & 2nd weeks in March,	2nd week in Sept.	3¾ bushels,	41 bushels,	6 10 0	3 15 0*p.*	
Rye-Grass,	1 3 0	—	4th week in June; a portion used for soiling,	3 bushels, and 10 lbs. red clover,	18 1 0	2 10 6	9 10 2*p.*	The Italian rye-grass afforded two, and a small portion three cuttings during the season.
Pasture,	2 3 0	—	—	—	—	1 16 6	0 13 6*p.*	

(Signed), PATRICK O'HAGAN, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

3rd January, 1853. JOSEPH M'KEE, Manager.

20. CARRICK MODEL AGRICULTURAL NATIONAL SCHOOL, County Fermanagh.

Carrick Model Farm.

January, 1853.

SIR,—I beg to submit to you my Second Annual Report on the above School.

The farm, at the commencement, consisted of but four Irish acres, but, from recent additions, it now comprises twenty-one statute acres; and as the holders of these farms had to be dispossessed for the non-payment of rent, owing to their bad system of farming, it may be conceived how unsightly in appearance and how much exhausted these farms must have been previous to my getting possession of them. But I expect that, before the termination of this winter, all the useless gripes, hedges, and old houses will be levelled, and by this means a further addition will be made to the farm, and its appearance much improved.

Cultivation.—I need not enter into detail as to the method of cropping, or the rotations adopted on this farm, which are the same as mentioned in last year's report: though the farm has got an additional quantity of land, it does not require any change in the system of management, with the exception of an enlargement of the fields. Though the profit in the Balance Sheet for this year appears small, yet, when the exhausted state of the land, and the disadvantageous time when some of it came into my possession, are considered, I think it will not be taken as an evidence of inefficient management; but I am fully convinced that, after it receives a thorough cleaning and manuring, and when a regular system of cropping is fully established on the farm, it will prove highly remunerative. Before leaving this subject, I wish to direct your attention to the plan of management pursued in reference to the potato crop. I commenced planting this crop on the 11th of February, in lazy-beds, on a light, dry, peaty loam: a sufficient quantity of farm-yard manure was applied, and, in addition to this, before second moulding, I applied fifteen barrels of lime per statute acre. The crop grew most luxuriantly. When the blight appeared in the latter end of August, I had the tops removed from one-half of the field; but, owing to some other pressing work coming on, I had to desist pulling the remainder. When I came to test the experiment, I found the produce on adjacent portions of two ridges to be as follows:—

	Sound.	Unsound.
Tops pulled, . .	6 stones, . .	2 lbs.
Do. unpulled, . .	5 stones 10 lbs.	3½ lbs.

I have, therefore, come to the conclusion that early planting of the early varieties of seed, and pulling the tops immediately on the blight making its appearance, counteract, in a great degree, the destructive operations of the potato blight.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Carrick Model Farm.

For information as to the other crops cultivated on the farm, I beg to refer you to the "Statistical Return," which I have drawn up with the greatest possible care and accuracy.

Cattle.—The management and house-feeding of the cattle are the same as stated in last report. The pigs prove a most profitable kind of stock, and the Berkshire boar, in particular, continues to be most lucrative. At some seasons there have been no less than five boars in this locality, but they have all now disappeared, in consequence of the desire felt by the farmers to be supplied with the improved breed.

School Department.—The school continues to be well attended, when it is considered that there are several other National Schools in the neighbourhood. The Agricultural Class varies from fifteen to twenty-three, according to the season; and all the members of it evince a great desire to acquire a combined literary and agricultural education. This class receives an hour's instruction daily on the following subjects:—nature and formation of soils, with their different modes of treatment; theory and utility of draining, trenching, and subsoiling; the preservation, application, and different kinds of manures; the cultivation of the different kinds of crops; the application of chemistry and geology to agriculture, &c. I feel great pleasure in being able to state, that greater attention is now given to these subjects both by the pupils attending this school and the farmers in this locality.

I have the honour, Sir, to remain your obedient servant,

THOMAS JAMIESON.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

SUMMARY of the Year and BALANCE SHEET.

Dr.	£	*s.*	*d.*
To Amount Valuation at commencement of Year,	142	17	0
,, paid in Rent, Taxes, &c.,	22	4	0
,, for Seeds, Lime, &c.,	0	11	1
,, for Cattle during the Year,	7	3	6
,, for New Implements,		—	
,, for Repairs, &c.,	0	6	2
,, for Labour,	18	1	6
,, for Value of Labour of Pupils,	4	0	0
Profit and Loss for balance, being gain on the year,	0	2	5
	£195	5	8

Cr.	£	*s.*	*d.*
By Amount received for Grain,	5	4	5½
,, for Potatoes, Roots, &c.,	3	6	10
,, for Cattle sold,	16	9	0
,, for Dairy Produce,	20	1	6½
,, for Eggs and Poultry,	4	4	0
,, Valuation, taken at close of year,	145	19	10
	£195	5	8

TABLE showing the CROPPING of the Carrick Model Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied. A. R. P.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre. tns. cwt. qrs. lbs.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c. £ s. d.	Profit or Loss per Statute Acre on the Culture. £ s. d.	Observations.
Turnips,	2 0 0	From 15th May to 15th June,	In field,	4 lbs.,	18 10 0 8			On the whole, I must say that I have a more remunerative crop this year than any of the other preceding ones. In particular, the potatoes and turnips did so well, though the land on which the latter crop grew was so much exhausted, that it was concluded to be unfit to grow any crop, yet, from the application of manure and after culture, it averages a pretty fair return.
Potatoes,	3 0 0	From 10th Feb. to 15th March,	October,	12 cwts.	2 0 0 0 sound,			
Oats,	8 1 20	From 15th March to 1st April,	22nd August to 11th Sept.,	12 stones,	11 barrels,			
Bere,	1 2 20	Middle of Oct., 1851,	1st to 7th August,	10 stones,	13 barrels,			
Grass for soiling,	3 0 0	1st week in April, 1851,	Cut at different times,	2½ bushels, 6 lbs. clover,	About 6 tons, green.	1 18 10	1 1 1½	
Pasture,	2 0 0	—	—	—	—			
Carrots, Altringham,	0 0 20	From 10th to 17th April,	From 1st to 13th November,	5½ lbs.,	11 8 3 9			
Mangels, long red,	0 0 20			5 lbs.,	24 13 0 17			
Cabbages,	0 1 0	At different times,	At different times,	Varies; generally planted from seedling bed,	—			
Total,	20 2 0*							

* The remainder is occupied by houses, yards, roads, &c.

(Signed), THOMAS JAMIESON, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

14th January, 1853. J. G. PORTER, Manager.

21. Bath Model Agricultural National School, County Monaghan.

December 31, 1853.

Bath Model Farm.

Sir,—In accordance with your directions, I beg leave to submit a Report of the operations connected with the Bath Model Farm for past year. During the winter months, the land intended for root crops received a deep ploughing, and that portion allotted for potatoes received a second ploughing, in the month of March, across the previous one; it was then harrowed, and all weeds and stones met with were cleared off. After being sufficiently cleaned, and brought to a proper tilth, ridges, 5 feet wide, were marked out with the plough, and the manure spread upon the surface. The sets were then dropped on the manure, in rows 12 inches asunder, and covered with earth from the furrows. The planting commenced the second week in April, a period certainly too late; but in consequence of the great amount of labour to be performed, it could not be commenced sooner. Towards the end of May the furrows were dug with the spade, pulverizing the earth as finely as possible, and then shovelling evenly over the ridges. This operation was performed with great care, as if done in a coarse manner, the growth of the potato is considerably retarded. The potatoes, on their appearance over the second covering, looked healthy, and continued so until checked by the disease, which made its appearance about the middle of July, when the tubers were being formed. From the destructive effects of this disease on the crop, a loss has resulted from its cultivation, and it is to be regretted that so great a breadth was planted; but the wish of having some potatoes at a time when other provisions are dear, induces the farmers to cultivate them, even should they sustain a loss thereby. The varieties planted this season, were Ballygawley Pinks, Early Bangors, and Mullins. The two first varieties were equally affected by the disease, but the latter, not only in this instance, but generally this season, withstood the disease better than any other kind, and yielded a greater return. The remainder of the root-crop division was cropped, a part with Skirving's improved purple-topped Swede, a part with purple-topped Aberdeen, and the remainder with White Globe turnips. It received two ploughings in the spring, and when properly pulverized and cleaned of weeds, the portion for Swedes was opened into drills 27 inches asunder, a considerable quantity of farm-yard manure was spread in the drills, and in addition, 2 cwt. of *guano* was applied to the statute acre, but not in contact with the manure. On commencing to close the drills, a person followed the plough, spreading the guano, which, on the closing of the drill, was covered with earth from the other side, and at such a depth from the crown of the drill as to prevent its being in contact with the seed. The drills being closed, were rolled with a light roller, and, on the smooth surface, a rut was made, in which the seed was strewn in a continuous row, and covered with the hand with fine mould from the sides of the drill. The portion sown the

last week in May, came up very evenly, and looked most healthy; but the fly committed its ravages, leaving many places without a plant. The part sown in June did not come up well, as the season being so very wet, was very unfavourable for turnip sowing, which had to be deferred until the latter end of the month, expecting more favourable weather; but even then, the sowing had to be proceeded with in unsuitable weather, so that what would be sown in the evening would be covered next day with a crust, and when the dry weather set in, became so very hard that the young plants where not able to force their way to the surface, and only where covered very lightly did they make any progress. The crop, on this account, was very thin, in consequence of which the return was considerably lessened. Towards the latter end of July the crop appeared very healthy, when the drill-harrow was applied twice between the drills before they were hoed; the thinning and hoeing next proceeded, after which they made considerable progress; the after culture consisted of weeding and harrowing between the drills. The sowing of the purple-topped Aberdeen commenced the second week in July, and owing to the previous month being wet, after the drills were formed, I had the lumps removed off the tops of the drills with forks, the seed was then sown with the turnip barrow, drawn by a horse; the roller which covered the seed was taken off, and the seed covered with the hand, as done with the Swedes; the crop brairded well, and was evener than the hand-sowing. The sowing of the White Globe turnips was finished in the latter end of July; they came up well. But owing to the soil being in an exhausted state (having grown many grain crops previous), the return was not so large as might be expected. In alluding to the cropping of this division in my last Report, I mentioned having a part occupied with *mangel* and *carrots*; but on account of the low state of the land, I gave up the idea of growing them, as they were not likely, under the circumstances, to prove remunerative. I also mentioned about trying an experiment with peat ashes, saturated with liquid manure, and *guano*. This season I tried the mixture on two drills of Aberdeen turnips, applying the same quantity as of guano; the result was in favour of the guano: but I am still of opinion, that if such a mixture be carefully prepared, and applied in sufficient quantity, convenient, but not in contact with the seed, it will be attended with profitable results.

Flax.—There was 1A. 2R. 19P., which was under potatoes the previous year, occupied with this crop. In spring the land was ploughed, harrowed, and brought to a fine tilth, and all weeds and stones cleared off previous to sowing. The seed (Riga) was sown the first week in April, at the rate of $2\frac{1}{4}$ bushels the statute acre, on the harrowed surface, and covered with the harrow; and as the division, of which this is a portion, was to be "laid down," grass and clover seeds were sown after the flax was covered, and finished with the roller. The flax was pulled on the 11th of August, and put

into the pond the same day. After remaining ten days in the steep it was lifted, spread out for six days on the grass, and then sent to mill. The produce was 25 stones to the statute acre, or 40 to the Irish acre, of an excellent sample, which brought 9*s.* 3*d.* a stone. The return would have been considerably higher, were it not for the exhausted state of the land. The flax crop is one which should now engage the attention of every farmer, as from this year's prices, it is certainly one of the best paying crops cultivated. The soil best adapted for its cultivation is one approaching to a heavy clay, neither too dry nor too wet, and capable of being sufficiently pulverized at the season of sowing, which ranges through the month of April. It does well after oats following a manured crop, or upon lea ground, where a crop of oats had been taken. Great care should always be taken to have the seed covered equally, otherwise the deep covered seed will be late coming to maturity, by which an irregular crop is raised. It is desirable then, in case the surface is uneven, to roll before sowing. The first operation after sowing is weeding, which should be particularly attended to, as if the weeds get above the young plants they prevent the free circulation of air, and also intercept the sun's rays, which are essential to the growth, not only of flax, but every other crop. Particular attention should also be paid to the watering and grassing, and if these precautions are attended to, flax will become a most remunerative crop.

White Crop.—There were 22 statute acres of oats this season, which yielded an average return. The variety sown was the *potato*, which, when it can be obtained pure, is an excellent kind, and suits this soil well. The period of harvesting being very favourable, the crop was got safely secured.

Clover and Grass.—This crop did not yield as well as was expected: the soil was in a good state for producing it, but the perennial grass was bad, so, on this account, the crop was light and short. The grass and clover sown this season look well, and promise to yield a large amount of green feeding for house-feeding next season.

Agricultural Class.—The 14 pupils forming this class have not attended so regularly as I would wish; but when they do attend, during the slack season of the year, they make considerable progress in agricultural information. It is gratifying to find how intelligently they answer on agricultural subjects, such as "rotation of crops," "house-feeding of live stock," the collecting and preserving of manure, &c. I mentioned in my last Report about an "Industrial Class," and were it established, I am quite confident the result would be a regular and a large attendance.

I have the honour to be, Sir, your very obedient servant,

JOHN FOLEY.

Thomas Kirkpatrick, Esq., M.D.,
Inspector of Agricultural
Schools, Education Office.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Bath Model Farm.

Dr. BALANCE SHEET of the FARM ACCOUNTS for the Year ended, 31st December, 1852. *Cr.*

	£	s.	d.		£	s.	d.
To Amount of Valuation at commencement of Year,	232	16	11	By Amount received for Grain and Flax,	69	12	0
,, Rent and Taxes,	46	11	1½	,, for Potatoes and Roots,	28	1	8
,, Seeds, Lime, and Manures,	23	6	8	,, for Cattle sold,	36	0	0
,, Cattle Purchased,	37	17	0	,, Dairy Produce,	27	2	3
,, New Farming Implements and Repairs,	4	0	0	,, Eggs and Poultry,	6	0	0
,, Labour,	31	13	3½	,, Inventory and Valuation at close of year,	264	11	0½
To Profit and Loss, being gain on the year,	55	1	11½				
	£431	6	11½		£431	6	11½

TABLE showing the CROPPING of the Bath Model Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Potatoes,	4 3 6	March and April,	November,	13 cwts.,	3 tons,	6 10 8¾	0 10 9¾ *l.*	This crop was attacked with the blight at an early stage of its growth, which rendered it nearly useless; the tubers were of the worst description.
Skirving's Swede,	5 0 5	June,	November,	4 lbs.,	17 tons,	5 10 3½	5 16 4½ *p*	This crop would be a great deal better, were it not that the season of sowing was very unfavourable; the season was so very wet, the seed came up very thin, and in many places never appeared at all.
Purple-topped Aberdeen,	4 1 24	Beginning of July,	November,	4 lbs.,	16 tons,	4 9 7½	2 3 8½ *p*	
White Globe,	1 2 0	July,	November,	4 lbs.,	11 tons,	4 9 7½	1 3 7½ *l.*	A very bad crop, the land being in a very poor state.
Cabbages,	0 1 4	March,	Used as required,	8,712 plants,	12 tons,	5 1 8½	1 10 3½ *p*	
Oats,	22 0 0	March,	September and Oct.,	14 stones,	8½ barrels seed 1½ tons straw,	2 8 1½	2 9 4½ *p*	A fair crop.
Flax,	1 2 19	1st week in April,	August,	2¼ bushels,	25 stones,	5 1 5¾	6 9 9¼ *p*	The return from this crop would be better were it not that fully one rood of the extent under it was in a very exhausted state.
Spring Vetches,	1 2 21	March,	Cut green,	12 stones,	9½ tons	2 6 8½	1 3 8½ *p*	A fair crop.
Clover and Grass,	4 3 34	April,	July,	1 bushel seed, 12 lbs. clover,	2 tons,	1 13 8½	2 1 3½ *p*	This crop would have been better, but the grass seed was not genuine.
Do. Do., cut green.	1 0 0	April,	Cut green,	1 bshl. seed, 12 lbs. clov.	6 tons,	1 11 2½	1 8 9½ *p*	
Pasture,	17 0 23	—	—	—	—	0 14 2½	—	
Total,	64 1 16							

(Signed), JOHN FOLEY, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

JAMES LANG, Manager, *pro tem.*

5th January, 1853.

Appendix K.

II. Appendix to Dr. Kirkpatrick's Report.

22. Drumhilla Model Agricultural School, County Monaghan.

1st January, 1853.

Drumhilla Model Farm.

Sir,—In accordance with your instructions, I beg to forward you a statement of my proceedings for the past year, together with the Balance Sheet of the farm accounts for that period.

The farm contains upwards of 50 statute acres, on which the three and four-course shifts are carried out, as described in my last Report. In the green-crop division of the three-course shift I sowed potatoes and beans, in drills 26 inches apart, and planted cabbages in drills 30 inches apart.

Grain—Oats and Bere.—The ground was ploughed into 12-feet ridges, and the grain sown in March, at the rate of 11 stones of oats and 9 stones of bere to the acre. The crop of both was heavy, but the bere was more prolific in straw than grain.

Grass.—The portion kept for hay was, in the month of August, after the hay was cocked, top-dressed with a compost of bog, soil, and lime, after which it was ploughed lightly, and sown with rape at the rate of 14 lbs. to the acre. It at present bears a fine appearance, and will be off in time for turnips. By cultivating the three-course shift in this manner, there can be a larger amount of green feeding raised, and particularly food which all kinds of stock are fond of. I have found that, before rape gets too hard, pigs are very fond of it, and, when it is given cooked, fatten on it as well as if fed on Swede turnips. The rape comes in at a season when all other feeding is scarce.

The four-course was cultivated as follows:—one-half was in oats, quarter in grass, quarter in turnips. The portion under oats was ploughed into 12-feet ridges, and got a dressing of sulphate of lime from the gas-works, which was of great benefit to it. The portion under turnips got three ploughings—the first in October, the second in March, and the third in May and June, previous to sowing. The manure applied was the same as last season. The Swedes and Aberdeens averaged 30 tons, while the globes did not average more than 16 tons, per acre. This I attribute to their being grown in a more elevated situation.

The profits of my farm do not appear so large this year as they did last year, owing to the loss of five of my cattle, and the injury of some of the others, by pleura-pneumonia.

I am, Sir, your obedient servant,

Robert Millar.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

DRUMHILLA Model Farm.

Dr. EXPENDITURE.	£	*s.*	*d.*
To Amount of Valuation at commencement of year,	359	19	3
,, paid for Rent, Taxes, &c.,	51	17	11
,, ,, Seed and Manure,	22	1	8
,, ,, Cattle,	37	1	11
,, ,, Implements, &c.,	3	9	7
,, ,, Labour,	40	9	6
,, of Free Labour by Pupils,	7	6	0
Profit and Loss, for balance,	90	11	3
	£612	17	1

RECEIPTS. *Cr.*	£	*s.*	*d.*
By Amount received for Grain,	11	7	3
,, ,, ,, Potatoes and Roots,	50	12	2
,, ,, ,, Cattle sold,	84	5	8
,, ,, ,, Dairy Produce,	16	1	0
,, of Dairy Produce used by family,	36	11	4
,, of Meal and Potatoes used by family,	47	10	8
,, of Valuation at close of the year,	366	9	0
	£612	17	1

TABLE showing the CROPPING of the Drumhilla Model Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Oats,	12 0 0	March,	September,	11 stones,	25 cwts.,	3 0 0	2 0 0*p.*	The best that ever was grown in this vicinity.
Bere,	2 0 0	March	23rd August,	9 stones,	13 cwts.,	2 18 0	0 12 0*p.*	Not good, as the soil was poor.
Potatoes,	7 0 0	Feb., Mar., & April,	October,	13 cwts.,	9 tons,	6 10 0	7 10 0*p.*	Eleven-twelfths sound, one-twelfth unsound.
Turnips,	7 0 0	May and June,	—	3½ lbs.,	18 tons,	5 10 0	4 10 0*p.*	Much injured by rot.
Beans,	0 2 0	February,	October,	2½ bushels,	3 bushels,	—	—	Much improved by topping.
Vetches,	1 1 0	March and April,	July and August,	10 st., Oats, 2,	22 tons,	6 0 0	3 12 0*p.*	Good.
Cabbages,	2 0 0	March,	—	—	32 tons,	7 0 0	5 15 0*p.*	Good.
Carrots,	0 1 0	April,	November,	4 lbs.,	16 tons,	7 10 0	10 0 0*p.*	Good.
Mangels,	0 1 0	April,	November,	4½ lbs.,	14 tons,	5 10 0	3 0 0*p.*	Middling.
Grass for soiling,	3 0 0	—	—	—	—	—	—	Good.
Grass for hay,	5 0 0	—	August,	—	4 tons,	2 5 0	3 10 0*p.*	Very good.
Grass for pasture,	6 0 0	—	—	—	—	—	—	
Rape,	2 0 0	August,	—	14 lbs.,	—	1 10 0	—	Bears a fine appearance.

(Signed), ROBERT MILLAR, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

ROBERT FORSTER, Manager.

5th January, 1853.

23. LOUGHASH MODEL AGRICULTURAL SCHOOL.

January 1, 1853.

SIR,—In submitting for your information the "Farm Account Book" and "Balance Sheet" of the receipts and expenditure of the Loughash Model Farm for 1852, I feel gratified in being enabled to state that the results of our operations for the past year have been attended with success. Last season was, fortunately, a dry and warm one, and brought the crops earlier to maturity than usual—an event of the greatest importance in an elevated district, such as this.

The principal operations connected with the farm during the year consisted in repairing the fences, in draining, subsoiling, and the necessary preparation of the land for the different green and white crops. The chief success in green crop cultivation depends on deepening the soil, keeping it dry and free of weeds. If these operations are neglected, or not carefully attended to, the chances of raising a remunerating green-crop are very little. I have subsoiled, since November last, a field of 6 statute acres (intended for next year's green-crop), to the depth of 18 inches, with the spade, digging up the bottom of the furrow after the plough, as detailed in my former Report, and raising all stones met with, either by the spade or plough. I have subsoiled, in this way, about 30 acres of the farm since it came into my possession, and I have experienced the most beneficial results from it. In general, light land, when subjected to a severe course of cropping for some time, begins to throw up a quantity of straw, with but little yield in grain. When a portion of the subsoil is mixed with the surface soil, after due exposure to the air, it renews the surface soil, and causes it to produce more grain, and of better quality, than if such a mixture had not been effected.

In executing all my improvements, I try to keep the expenditure, if possible, within the return to be expected from such improvement, as the profits from farming depend on producing the greatest return at the least cost, and in converting even the smallest portion of the produce to profitable account.

I rely chiefly on the produce of the stock for the profits which we derive from the land. It will be seen from the Balance Sheet that I have sold upwards of £70 worth of stock within the year, besides £58 worth of dairy produce. It would have taken a large portion of the crop of the farm to draw as much as these two items alone, while the benefit does not stop here: the quantity of manure thus accumulated enables me to apply a large quantity to the land, without which it could not be expected to continue to yield anything like a remunerating crop. I think it unnecessary to detail specifically each operation gone through during the year, as I have already stated, in my former Reports, the system pursued

here, which chiefly consists in bestowing judiciously upon every perch of the farm such an amount of labour as is capable of giving the greatest return, our sole aim being to have the greatest breadth of the farm under crop, and to turn that crop to the best possible account.

It is also gratifying to know that the people in this locality still continue prosperous, gradually becoming better acquainted with the management and care of stock, and of producing food necessary for their support, thereby increasing the quantity of manure, and the consequent fertility of their farms—the stock and its produce in milk and butter meeting their monetary outlay, and leaving the grain and other produce of the farm for their own support. They are thus, through their own industry and economical management, able to support themselves on small farms, which otherwise would be impossible, if a defective system of tillage was pursued.

The Agricultural Boarding Class continues to merit a fair share of public attention. It will be seen, from the list of pupils furnished, that 5 have got into places during the year. The fact of such a number being employed in situations out of this school is the best proof that could be offered of their qualifications. I have endeavoured, so far as the limited time for instruction affords, to impart such an amount of literary as well as agricultural information as enables the pupils to fill with success various employments, which a more limited education would have rendered them incapable of occupying. Though employed only half the day at school, and the other half at manual labour, they make as much progress in literary acquirements as if the whole of their time had been employed at school.

They receive each summer a course of instruction in surveying, mapping, levelling, and taking vertical sections of roads, and various other useful applications of science to practical purposes, which is of great service to them. We have, likewise, a small laboratory, which enables us to give an outline of the elementary principles of chemistry, as applied to agriculture ; and geological specimens, illustrating the various rocks composing the crust of the globe. They have thus a field of investigation opened up to them, which serves to expand the mind, and give them enlightened views upon subjects which are of essential service to them through life.

I remain your obedient servant,

JAMES MOORE.

To Thomas Kirkpatrick, M.D.,
Agricultural Inspector of
National Schools.

NAMES of Pupils who have left, or who are yet in training at the Loughash Agricultural School for 1852.

Names of Pupils.	Date of Entrance.	Destination.	Date of Leaving.
Michael Healy, .	Dec., '49.	Clerk in a shirt manufactory,	Dec., '52.
James Tracey, .	Dec., '49,	Emigrated to America,	June, '52.
John M'Philemy,	Jan., '49,	Acting as Engineer's Assistant on the Coleraine Railway,	Aug., '52.
James Donovan, .	June, '49,	Went to Glasnevin Model Farm,	Oct., '52.
John Donovan, .	June, '49,	Still at School.	
Patrick Clarke, .	July, '49,	Employed as Literary Teacher of Loughash School.	Aug., '52.
John Thompson, .	Mar., '50,	Employed as Land Steward to William Jefferson, Esq.,	Sept., '52.
John M'Farland,	Dec., '50,	Still at School.	
John O'Neill, .	Dec., '50,	Do.	
Henry Wilson, .	Dec., '50,	Do.	
Peter Kelly, .	April, '51,	Employed as Clerk in Drogheda, . .	Dec., '52.
Robert Campbell,	Sept., '51,	Still at School.	
William Smyth, .	Sept., '51,	Do.	
Edward M'Anena,	Oct., '51.	Do.	
John Smyth, .	Oct., '51,	Do.	
Thos. Thompson,	Oct., '51,	Do.	
George Ansel, .	Oct., '51,	Do.	
Wm. M'Glinchy,	Jan., '52,	Do.	
James Breeson, .	Jan., '52,	Do.	
Michl. M'Mahon,	April, '52,	Do.	
Edmund Malone,	April, '52,	Do.	
George Gallen, .	April, '52,	Do.	

BALANCE SHEET of the LOUGHASH Agricultural Model Farm, for the Year ending 31st December, 1852.

Dr.	£	s.	d.
To Amount of Valuation at commencement of year,	300	11	6
,, paid for Rent, Taxes, &c.,	33	12	4
,, ,, Seeds, &c.,	15	0	6
,, ,, Cattle during the year,	2	8	0
,, ,, Labour during the year,	30	5	0½
Gratuitous labour of Pupils,	51	12	1½
To Amount paid for implements and Repairs,	7	12	0
Profit and Loss, gain on farming transactions of year,	80	7	1
	£521	8	7

Cr.	£	s.	d.
By Amount received for Grain,	40	18	9
,, Potatoes,	22	17	0
,, Cattle sold,	70	6	6
,, Dairy produce,	58	8	8
,, Eggs and Poultry,	2	14	2
By Amount of Inventory taken at close of the year, including £8 expense of subsoiling 6 acres of a field intended for next year's green crop,	326	3	6
	£521	8	7

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Loughash Model Farm.

TABLE showing the CROPPING of the Loughash Model Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.,	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Oats,	17 0 0	From 27th Mar. to 10th April,	August and Sept.,	14 stones,	grain, 150 st. straw, 160 st.	3 0 4	2 5 11	The crops in general this season turned out better than last year.
Turnips,	5 2 0	From 12th May to 15th June,	Winter,	From 3 to 4lbs.	24 tons,	7 5 4	2 14 8	
Potatoes,	4 0 0	From 1st to 16th April,	October,	12 cwts.,	4 tons,	8 5 10	4 14 2	
Cabbages,	0 1 0	From 1st April to 1st May,	Winter,	—	24 tons,	5 17 6	6 2 6	
Cutting Grass,	8 0 0	Last week of April,	July,	12lbs. clover, 1½ bsh. Rye-grass,	2½ tons,	2 2 4	2 17 8	
Pasture,	6 0 0	—	—	—	—	1 0 0	0 10 0	
	40 3 0							

(Signed,) JAMES MOORE, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief.

7th January, 1853. BERNARD M'KENNA, Manager.

Appendix K.

II. Appendix to Dr. Kirkpatrick's Report.

Sallybank Model Farm.

24. Sallybank Model Agricultural National School.

January, 1853.

Sir,—In compliance with the instructions conveyed in a circular received from the Education Office in October last, I beg to forward the following Report on the above School, together with the Returns of Statistics and Cropping for the year 1852.

Rotations.—The extent of the farm, as stated in former reports, is eight statute acres, including two roods waste and two roods laid off as a garden. On the remaining seven acres I had followed a "five-course shift," which I am about changing into a six. It may be necessary here to state my reasons for giving up the five-course, which with many has been a favourite, and for adopting the present one. The five-course, it will be remembered, contains two grain crops, two grass, and one green. I found that the grain did not pay, and, in consequence, even before abandoning this rotation, I reduced the grain from two-fifth to little more than one-fifth, by substituting vetches in its stead. This removed one objection to the five course, but there were others still, among which I may mention the small quantity of green root crops. The two-course, where green and grain crops are made to alternate, has one-half green crops; the three-course, one-third; and four-course, one-fourth. It will be immediately seen that each of these produce more green root crops than the five-course; yet to neither of these could I resort, as, in two of them, half the farm produces grain every year. In adopting the six-course, as explained below, my object has been, while endeavouring to grow crops *that will pay*, to grow such crops as will enable me to keep most cattle, and thereby make most manure, which is most important in any case, but especially so on this miserably poor soil. It is as follows—grass, two years; third year, potatoes, or other green crops, in case potatoes do not succeed; fourth year, winter and spring vetches; fifth, turnips and mangels; sixth, oats, with clover and grass seeds. The chief features of this rotation are, that grain, which, in most rotations, varies from one-half to one-third, is here reduced to one-sixth, and that vetches are to occupy a division of the rotation, to which they are fully entitled. In other respects it does not differ from the three-course or the six-course on the same principles, there being one-third green crops and one-third grass. I need scarcely remark that after winter vetches there will be a crop of late turnips, and after the spring vetches cabbages and rape. By this means, one-half the farm is manured every year for green crops. Heretofore, the second year's grass in the five-course scarcely paid, but I expect the present course, in consequence of the constant manuring, will render the second year's grass more productive. The want of straw for bedding, will, to

some, appear an objection to the rotation I have now adopted. In my case, this objection would not hold, as I can purchase for ten or twelve shillings as much coarse hay as will do more in the way of bedding and manure than an acre of straw, there being some thousands of acres in the neighbourhood which have gone out of cultivation during the last six or seven years. I know farms, which heretofore paid £1 per acre, the coarse herbage of which now scarcely pays the poor rates and county cess. This shows that a *rotation, to be judicious*, must be adapted to *local circumstances.*

Statistics.—From return No. 1 it will be seen, that the entire cost of cultivation of this farm, during the past year, has been £37 14*s.* 11*d.*, or an average of £4 14*s.* 4*d.* per acre; and the return from cultivation, or value of crops produced, at the current price here, £43 18*s.* 8*d.*, which leaves a profit of £6 3*s.* 9*d.*, or 15*s.* 5½*d.* per acre. The crops being converted into milk, butter, pork, poultry, &c., leave a profit in the "Balance Sheet" of £9 5*s.* 8½*d.* on the year's transactions, together with defraying the expenses attending their conversion into these articles, viz., services of dairy maid, and fuel, £6 15*s.*, which are set down in the "Balance Sheet," but not in the returns before mentioned. This profit will appear trifling to those who realize £4 or £5 per acre, but to me it appeared so favourable, as to cause me to examine very carefully the valuation (made by a very competent person), lest anything had been valued too high. Return No. 2, if carefully compiled in different localities, will be of great service. It will be easily perceived, that the cost of production will be different on different farms. Rent alone, which varies from 5*s.* to £5 per acre, will cause much difference. Manure is another item which, according to the value set on it in different localities, and the different quantities applied, will alter the cost of production. At the distance of four or five miles from a town the carriage alone will make it from 1*s.* 6*d.* to 2*s.* per ton higher than in the immediate locality of the town. Labour and seed, also, have their influence on the cost of production of the different crops. Independently of these, there are other circumstances which must be taken into account. The manure applied to the green crops exerts its influence on the succeeding crops of grain and grass, and, as a matter of course, a portion of it should be charged to them. Again, the clover and grass seeds sown with a grain crop should, on no account, be charged to that crop, but to the following year or two years' grass. In the accompanying returns for the past year, the cost of cultivation of the spring vetch is set down at £3 per statute acre, and of the winter vetch at £5 4*s.* This may appear inconsistent. The former was grown after green crops, and charged with a portion only of the manure applied to the previous crop: the latter after oats, and manured. These explanations will, I hope,

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Sallybank Model Farm.

remove any difficulty or seeming inconsistency which may appear in these returns.

Balance Sheet.—On looking over the Balance Sheet, it will be seen that the bill for labour, as usual, is high, being over £3 per acre. The receipts for dairy produce have fallen short of the two previous years. This is owing to a good deal of the milk being given to pigs, as also to the rearing of two calves, which were sold last November for £5, and one which is being reared at present.

In conclusion, I beg to remark that, though convinced from experience that by the judicious expenditure of much capital bad land can not only be improved, but made to repay the capital, with interest, when had on reasonable terms; still, I would prefer expending capital on good land, and paying what may be considered high rent, to getting bad land rent free.

I have the honour to be, Sir, your very humble servant,

JEREMIAH RYAN, Teacher.

Thomas Kirkpatrick, Esq., M.D.,
Inspector of Agricultural
Schools.

BALANCE SHEET.

Dr.

	£	s.	d.
To Amount Valuation at commencement of year,	55	1	6
,, paid in Rent and Taxes,	5	6	0
,, paid for Seeds,	4	16	2
,, ,, Hay and Grass,	6	12	8
,, ,, Turnips and Mangels,	1	17	4
,, ,, Pig Feeding,	8	5	4½
,, ,, Cattle,	8	5	6
,, ,, Implements and Repairs,	0	19	9½
,, ,, Labour of Farm, £12 13 11			
,, ,, Dairy Maid, 6 0 0			
,, ,, Pupils, 5 0 0			
,, ,, Fuel for Boiler, 0 15 0			
	24	8	11
To Interest on Permanent Improvements,	2	5	0
To Profit and Loss, for balance,	9	5	8½
	£127	3	11½

Cr.

	£	s.	d.
By Amount received for Grain,	3	6	8
,, ,, for Potatoes, &c.,	5	10	10
,, ,, for Cows and Pigs sold,	29	9	1
,, ,, for Dairy Produce,	22	10	10
,, ,, for Eggs and Poultry,	4	11	0½
,, of Inventory and Valuation taken at close of year,	58	15	6
,, of Permanent Improvements effected during the past year,	3	0	0
	£127	3	11½

TABLE showing the CROPPING of the Sallybank Model Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.				tons cwt. qrs.	£ s. d.	£ s. d.	
Hay,	1 0 10	Seed sown with Oats, April, '50,	July,	10lbs. clover, 2 bshs. rye-grs.,	1 6 0	2 0 0	Nil.	Oats—the return set down here is the average; that grown after green crops produced 80 stones per acre, whilst that on ley produced only 52.
Clover and Rye-grass for soiling,	1 1 0	April, 1851,	May to October,	10lbs. clover, 2 bshs. rye-grs.,	3 cuttings, 10 10 green,	2 10 0	2 15 0*p.*	
Spring Vetches,	0 1 21	April, 1852,	July and August,	12 stones,	10 5 green,	3 0 0	2 2 6*p.*	
Oats,	1 3 24	7th April, 1852,	4th week in August,	10 stones,	64 stones,	2 18 6	0 8 6*l.*	
Flax,	0 0 4	8th May,	—	—	—	—	—	
Turnips,	1 0 14	3rd week May, & 1st week July,	Nov. and Dec.,	3 lbs.,	21 15 0	8 10 0	5 1 10*p.*	Turnips—Skirving's Swede has yielded a greater return than Laing's, or East Lothian, which I tried this year, The Swedes transplanted in July, after Vetches, were more valuable than Aberdeens sown the same time.
Mangels,	0 1 0	2nd week May,	November,	3½ lbs.,	18 7 0	8 10 0	5 5 3*p.*	
Potatoes,	1 0 27	March, 1852,	July to November,	100 stones,	3 0 0	10 0 0	4 0 0*l.*	
Cabbages,	0 0 21	Feb. and March,	June to December,	2 ft. by 1½ ft.,	16 12 0	9 0 0	3 9 0*p.*	
Parsnips,	0 0 16	1st week in April,	October,	5 lb.,	6 4 0	9 15 0	Nil.	
Peas and Beans,	0 0 13	March & April,	July to September,	10 stone,	—	—	Nil.	
	7 2 0							Fully one-half the potatoes were diseased.
Stolen Crops:								
Winter Vetches,	0 1 10	September, 1851,	May and June, 1852,	10 stone,	14 16 0	5 4 0	2 4 0*p.*	
Cabbages,	0 1 24	August & Sept.,	Given to cattle during winter,	—	—	—	—	
Rape,	0 0 16	August & Sept.,				—	—	
	0 3 10							

(Signed,) JEREMIAH RYAN, Teacher.

I certify that the above Returns are correct according to the best of my knowledge and belief.

14th January, 1853. EDWARD BERNARD, Manager.

25. BELVOIR MODEL AGRICULTURAL SCHOOL, County Clare.

7th January, 1853.

Belvoir Model Farm.

SIR,—I shall commence my Report for the year 1852, on the above school, by bringing under your notice (in the order in which they are set forth in Return No. 2 of Statistics) those crops which appear to me to require explanation, or upon which I can make any observations that may interest the readers of this Report.

Potatoes.—On looking over the statistical returns herein enclosed, and those of my last Report, you will at once perceive the great difference there is in the produce, per acre, of the crop in each year. This arises from two causes: the crop of 1851 being planted in a more appropriate soil, and being stored before the disease had made any marked progress among the tubers. Had I been so fortunate as to plant all my potatoes in November, there would be no such discrepancy in the produce, for, among those that I *did* plant in November, to the amount of one rood, there was not a *single* diseased potato to be found, *all* having arrived at maturity before the disease had set in. This, I should think, is a useful lesson, and one that ought not be forgotten. In any case, no time should be lost in raising the crop, as soon as sufficiently matured.

Turnips.—In this crop there is also a difference of produce, arising not from any inequality of soil, but from an inequality of manure; for the produce of that portion manured as last year, not only equalled, but exceeded last year's crop by two tons to the acre, the manure in each case being farm-yard manure; while the portion not manured with farm-yard manure, but with sea-weed, fell short of last year's crop by 10 tons to the acre, thus reducing this year's crop of Swedish turnips to an average of 15 tons, last year's being an average of 19 tons to the acre.

Flax.—The seed for this crop being home-saved, and not being certain of its vitality, I sowed one bushel more than the usual quantity, in the hope, that should any of it fail, I would still have a sufficiently thick braird. It was well I did so, for the crop was scarcely thick enough; it did not realize so large a profit as in the preceding year, chiefly on account of the price not being so high at the time I had it ready for sale. In the meantime I would strongly advise its culture, provided we were not subjected to a monopolizing market. And were nothing else to induce me to cultivate it, I would do so, in order that I might be enabled to collect a sufficiency of manure, to have it succeeded by a transplanted crop of turnips, mangels, or cabbages, which, if well manured, would be little inferior to a regular crop; and even if inferior in weight, they would have the advantage in quality. About half a rood of transplanted turnips I had this year, yielded at the rate of 16 tons

APPENDIX K.

I. Appendix to Dr. Kirkpatrick's Report.

Belvoir Model Farm.

to the acre. The period at which I transplanted them was on the 31st July and 2nd August.

Oats.—The land for this crop I got dug, in the early part of the year, into nine feet ridges, and sowed in the following manner:—the seed being shaken, I caused little boys, with hand hoes, to go over the ridges, and hoe them as if they were hoeing turnips, and subsequently got the furrows dug, and then shovelled over the ridges, the result of which was, that many persons who saw the crop, were surprised to see it grow so evenly; and still more so, when they heard, what was to them, the novel way in which it was sown. This is a most expeditious mode of culture, and one which might be most advantageously adopted by the small farmers of Ireland. Eight boys, for two hours each day, sowed 1A. 1R. 20P. in five days. It produced better than any oats I had during my cultivation of the model farm.

Proposed Alterations in the Course of Cropping.—Having in a former Report explained the divisions of the farm, both natural and artificial, I shall now only say, that up to this, the four, five, and six course rotations have been pursued on it—the first and last named being carried out on the eastern and poorer portion; the second, on the western and richer division; and from the fact of half the land in the poorer part of the farm being under grain crops, you will at once see the necessity that exists of effecting the proposed change.

I will first take the four course, and endeavour to show, that by the cropping I intend to pursue this year, I shall gain the ends above stated. For comparison sake I will give the cropping of each.

Proposed Cropping.	*Former Cropping.*
1st Year, Green Crops, manured.	1st Year, Green Crops, manured.
2nd ,, Barley, with Grass Seeds.	2nd ,, Barley, with Grass Seeds.
3rd ,, Grass for soiling, &c.	3rd ,, Grass for soiling, &c.
4th ,, Potatoes, &c., followed by Winter Vetches, without manure, and which will be off in time to sow or plant a green crop.	4th ,, Oats.

From the above it will be seen, that by the proposed form of cropping, *half* the land under tillage will be occupied by green crops, one-fourth grain, instead of *one-half* the quantity of grass remaining the same as before.

The six crop shift I purpose forming into a three and five—not the usual five-course shift, as will be seen below, but a *two* green, two grain, and *one* grass crop—thereby manuring two-fifths of the farm instead of *one*-fifth, by raising a manured green crop instead of hay, a crop that here would not pay the expense attending it.

Proposed Course—Five-Course.	*Former Five-Course.*
1st Year, Green Crops, manured.	1st Year, Manured Green Crops.
2nd ,, Grain, with Grass Seeds.	2nd ,, Grain, with Grass Seeds.
3rd ,, Grass for soiling, &c.	3rd ,, Grass for soiling, &c.
4th ,, Potatoes, Turnips, &c.	4th ,, Grass, 2nd year.
5th ,, Wheat or Oats.	5th ,, Oats.

The alterations above stated, I have resolved to adopt, because I am convinced that they are better suited to enable me to enrich the land, raise a larger amount of green crops, and keep more stock. I will have, by the change, in 5A. 2R. 28P., an increase of 3 roods of feeding crops, making in all, 3A. 2R. 17½P. of that variety of crops, which will be but 1A. 1R. 0P. less of feeding crops than I had heretofore from 10A. 2R. 28P., the extent under field culture.

I am determined to stock the western or richer side of the farm, containing 5 acres, with sheep, until such time as the land on the eastern side be made richer, by the application of what manure I can command. I expect to be able to have it stocked before the end of the year.

I would be neglecting an act of duty if I failed in bringing under your notice the "Paid Industrial Class" of this school, as I feel most happy in being able to state, that in no class under my care is literary improvement so visible; nor is there any class in the school that pays so marked an attention to their studies, both literary and agricultural. On the whole, I very much regret that we could not have more in that class—not from any benefit which might accrue to myself, but from a conviction that there is nothing which would conduce more to their improvement, both literary and agricultural, and, consequently, to their future welfare.

At the request of many of the young men of this neighbourhood, I opened an evening school; and from the attention they pay to a lesson on agriculture, as taken from the "Agricultural Class Book," for three quarters of an hour each evening, I am led to believe that a vast deal of good must result from it, more especially, as nineteen out of thirty-six, the number on the books, are between twenty and thirty years of age. In my opinion, no step could be taken better calculated to improve the agriculture of the locality.

In conclusion I beg to express my gratitude to my patron, D. J. Wilson, Esq., for his unabated kindness to me, and for the deep interest he continues to feel in the welfare of this school.

I am, Sir, with great respect, your most obedient servant,

THOMAS MADDEN,

To Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector, Education Office, Dublin.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Belvoir Model Farm.

Dr. BALANCE SHEET for the Year ending, 31st December, 1852. *Cr.*

	£	s.	d.		£	s.	d.
To Amount of Valuation at commencement of Year,	45	6	4	By Amount received for Grain,	9	12	3
,, Paid in Rent,	12	0	0	,, for Potatoes, &c.,	10	6	10
,, Seeds, Lime, Manure, &c.,	4	8	5½	,, for Cattle sold,	21	9	6
,, Paid for Cattle,	7	7	0	,, for Dairy Produce,	12	10	10
,, Farming Implements,	0	6	9	,, for Eggs, &c.,	1	5	3
,, Labour,	4	18	0	By Amount of Valuation taken at the close of Year,	37	6	0
,, Gratuitous Labour of Pupils,	9	18	6				
Profit and Loss—Gain on Year,	8	5	7½				
	£92	10	8		£92	10	8

TABLE showing the CROPPING of the Belvoir Model Agricultural National School Farm, for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Potatoes,	1 0 0	Nov. and March,	October,	80 stones,	600 stones,	7 17 6	4 12 6*p.*	The discrepancy which appears in the cost of production this year and last, arises from the fact, that on last year I did not charge for manure. Carrots were partially destroyed by the wire-worm. The white turnips were manured with "Peat Guano," which appears to me, not to be an efficient manure.
Swede Turnips,	1 0 0	May 28 and June 14,	December,	4 lbs.,	15 tons,	7 2 6	3 0 0*p.*	
White Turnips,	0 2 20	June 26,	October,	3 lbs.,	12 tons,	4 7 4	0 8 8*p.*	
Mangels,	0 1 20	May 12,	December,	5 lbs.,	20 tons,	7 8 0	7 12 0*p.*	
Carrots,	0 0 10	April 10,	November,	4 lbs.,	10 tons,	8 2 6	0 12 6*l.*	
Parsnips,	0 0 10	April 10,	November,	4 lbs.,	12 tons,	8 2 6	0 17 6*p.*	
Cabbages,	0 2 20	Different periods,	Various times,	In drills 2½ and 1½ feet between plants,	Not taken,	7 13 0	0 10 0*p.*	
Vetches,	0 1 20	Nov. & February,	June and August,	12 stones and 3 stones rye,	12 tons,	3 1 6	0 10 6*p.*	
Rape,	0 0 20	August,	April,	In drills 2½ and 1½ feet between plants,	Not ascertained,	3 0 0	0 9 4*l.*	
Flax,	0 1 20	May,	August,	3½ bushels,	Fibre 30 stones, seed 10 bushels,	6 15 0	0 8 4*p.*	
Wheat,	0 1 10	February 21,	September,	12 stones,	100 stones,	3 0 0	2 8 4*p.*	
Oats,	1 1 20	April 1,	August 20,	14 stones,	113 stones,	2 12 0	1 1 6*p.*	
Barley,	0 2 30	April 27,	August 29,	12 stones,	125½ stones,	2 14 6	1 8 7*p.*	
Grass, 1st year,	1 3 0	May, 1850,	Took three cuttings of portion, hay of remainder,	1½ bshs. Ital., 1 per. rye-grass, & 10 lbs. of red clover,	Not taken,	2 10 0	0 16 6*p.*	
Grass, 2nd year,	1 0 0	Sown by Predecessor,	July,	Cannot state,	1½ tons,	1 10 0	—	
Grass, 3rd year,	1 0 0	—	—	—	1½ tons,	1 10 0	—	
Permanent Pasture,	1 0 20	—	—	—	1½ tons,	1 10 0	—	
Under cultivation,	11 3 20							

(Signed), THOMAS MADDEN, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief.

D. WILSON, Manager.

January 15, 1853.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Rahan Model Farm.

26. RAHAN MODEL AGRICULTURAL NATIONAL SCHOOL.

5th January, 1853.

SIR,—In again submitting to your consideration a Report of the various operations carried on this farm, it is satisfactory to me to be able to state, that the results which might be anticipated from affording an example of the improved system of farming might easily be observed here during the last year. All the crops cultivated on the Model Farm were, without exception (compared with the produce of this district), excellent. Land which five years ago produced only from five to eight barrels of oats per acre, last year produced thirteen barrels.

This two-fold increase in so short a period of time, is the effect of the change of system, by which the land undergoes such a course of cropping, that one crop, instead of robbing its successor of nourishment, enriches and prepares the soil for it, and by which a large quantity of manure is accumulated and applied in the proper places, in the rotation each year. This is no vague statement, but a practical fact proved by contrasting the produce of both years, and by the adoption of a similar system, the agricultural produce of the district, would in a great many cases be increased in a similar proportion; and hence, the practical example set forth here during the last year, should influence a great many (especially the small farmers, for whose benefit and instruction agricultural schools are more particularly intended) to change their erroneous system of farming.

The farm is divided into five divisions of 2A. 1R. 2P. statute each, on four of which the four-course rotation is strictly carried out. The cropping last year was as follows:—

		A.	R.	P.
No. 1 Division,	Wheat,	1	0	34
,,	Oats,	1	0	8
		2	1	2
No. 2 Division,	Potatoes,	0	3	10
,,	Mangel,	0	1	25
,,	Swede turnips,	0	1	25
,,	Winter vetches succeeded by turnips,	0	1	30
,,	Carrots,	0	0	32
		2	1	2
No. 3 Division,	Clover and Italian rye-grass,	2	1	2
No. 4 Division,	Oats on lea,	2	1	2

No. 1. Division.—The wheat, red chaff white, was sown on the 15th of December, in drills twelve inches asunder; seed, 9 stone per statute acre; it was fit to reap on the 16th of August, and yielded at the rate of 6 barrels, 7 stone,

per statute acre. The remainder of this division was sown with Hopetoun oats, drilled at the rate of 11 stone of seed per statute acre. In consequence of the crop being very long and heavy, it lay quite flat, but having filled early, it suffered less injury than I expected. It was reaped the 18th of August, and yielded 13 barrels per statute acre. This division was sown with clover and Italian rye-grass in April.

No. 2. *Division, green crop, manured.*—This division, except the part under winter vetches, was dug in the winter to the depth of 14 inches. This operation was difficult to perform, from the nature of the subsoil, and the large quantity of stones contained in it, which were removed on hand-barrows in the spring. As I mentioned in my last report, this division being foul, required great care and attention in cleaning; accordingly, it was all turned over with forks in the spring, the earth being finely pulverized, and the weeds thrown on the surface in the process. These were afterwards carefully picked off, and conveyed to the manure heap. I mention this as being the best method I have yet used for cleaning land. Kemps, lumper, and cattle potatoes were then sown on the 9th of April; mangel on the 8th of May, Swede turnip on the 12th, and the carrots on the 14th of May, in the usual manner of drill culture. The turnips were attacked by the fly, and were resown in holes twelve inches apart, the second week in June, prepared finely pulverized manure having been previously deposited therein. They grew very quickly, and eventually surpassed the plants that survived the attack of the fly. The after-culture, and weeding of all these crops, were duly attended to.

The winter vetches, sown on the west side of this division in October, were ready for cutting the 1st of May, and on the 28th of May weighed 16 tons, 3 cwt. 2 qrs. per statute acre. After their being consumed in the end of June, the land was prepared for a crop of Dale's Hybrid turnip, but owing to the wetness of the season at that time, they could not be sown until the 10th of July. From the nature and quality of the manure which I applied, being peat mould saturated with urine, and allowed to ferment, they grew so vigorously that they far exceeded turnips in the neighbourhood that were sown a month earlier. Produce when weighed in December, 28 tons per statute acre.

No. 3. *Division,* being clover and Italian rye-grass, needs no comment farther than that the clover grew so evenly and beautifully through the grass as to render the second and third crops productive, and much relished by the cattle. I have observed that the grasses grow so very thin after the first crop, that unless there be a fair proportion of clover, the second and third cuttings will be very light. Weight in hay, first crop, 3 tons 11 cwt.; second ditto, 2 tons 15 cwt; third ditto, 1 ton, 10 cwt. per statute acre.

No. 4. *Division, Oats on lea.*—Hopetoun and white Tartary

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Rahan Model Farm.

oats were sown on this division the first week of March. The former lay flat, but did not suffer much injury, as it filled, and ripened well; it produced more straw and less grain per acre than the latter.

The other division of the farm, I regret to have to state, yet remains wet and unproductive. I trust it will not long continue so, as, after the drainage of the river will have been completed, I am determined to be one of the first to avail myself of its advantages, and shall then establish a separate and different rotation on this portion of the farm.

In consequence of the soil being shallow and stony, I have had to omit sowing rape, as a stolen crop last year, as it, with the winter vetches, would occupy too large a proportion of the division, and thereby prevent the deepening of it, which can only be conveniently done in the winter months; but as all the farm, with the exception of a few small plots will be deepened after this winter, and being desirous of cultivating flax regularly, without diminishing the extent of the green or grain crops, which are at the present time in the proportions fit to meet the demands of the farm; with this view I purpose cropping the four-course rotation, as is shown in the annexed diagram :—

	No. 1 Division.	No. 2 Division.	No. 3 Division.	No. 4 Division.
First, or 1853 year.	Grass cutting.	Grain, with seeds.	Oats and Bere on lea. The Bere succeeded by transplanted Rape.	Winter vetches succeeded by turnips. / Flax succeeded by cabbages. / Potatoes, Mangel, &c.
Second year.	Oats and Bere on lea. The Bere succeeded by transplanted Rape.	Grass cutting.	Winter vetches succeeded by turnips. / Flax after rape, succeeded by cabbages. / Potatoes, Mangel, &c.	Grain with seeds.
Third year.	Flax after rape, succeeded by cabbages. / Winter vetches succeeded by turnips. / Potatoes, Mangel, &c.	Oats and Bere on lea. The Bere succeeded by transplanted Rape.	Grain, with seeds.	Grass cutting.
Fourth year.	Grain, with seeds.	Flax after rape, succeeded by cabbages. / Winter vetches succeeded by turnips. / Potatoes, Mangel, &c.	Grass cutting.	Oats and Bere, with seeds.

By the above mode of raising stolen crops, it can easily be perceived that the quantity of grain or green food is not lessened by the growth of flax. One-fourth of the field where lea oats grew, is to be sown with winter vetches, and succeeded by turnips in June or July; and the one-fourth where the bere grew is to be cropped with transplanted rape, about half an ordinary manuring being applied. As the rape will be fit for use in March, the land by a little cultivation will be in the best possible state for flax which may be sown early in April. On the removal of the flax in the end of July, or beginning of August, the land can be prepared, a full supply of manure given, and cabbages transplanted thereon, and thus the whole division will be under green crop, as if no flax were sown; and by the tilling and manuring for the cabbages, this part will be cleaned and enriched for the succeeding grain and grass crops. By a little consideration on the above course of cropping, it will be understood, that by alternating the flax and vetches with the one-half of the division off which no stolen crop was raised, and with each other, flax and vetches will fall on the same piece of land only once in sixteen years.

The reason for sowing bere where it is intended to plant the rape is, its being fit for the sickle a fortnight or more, earlier than any other grain will admit of—the rape being transplanted, &c., before the harvest operations interfere with its labour.

The stock kept on the farm during the year, were—two cows, two heifers, one mule, and from two to six pigs, which were all house-fed on the produce of the farm, nothing having been purchased for this purpose, only a little bran and mill-dust, and one ton of hay. They are regularly fed and cleaned, by which they are maintained in good condition.

The dung-heap is managed as usual, with this difference, that I use more peat-mould in the tank, and in alternate layers with the dung, which last year I found to be very beneficial to all the green crops, it causes potatoes to be freer from taint, and creates a quicker growth in all small seeds, which is peculiarly desirable for the turnip crop. These are advantages which should recommend the liberal supply of peat-mould to the dunghill. For the want of a covered shed to preserve this mould dry during the winter months, I cannot keep it so regularly in the channels as I would wish. As, besides losing the power of absorbing, the damp arising from it would injure the cattle. This, to a certain extent, is a serious loss to the manure heap, which at the present time contains 119 solid yards.

Agricultural instruction.—There are 31 boys (average 22) receiving agricultural instruction. These comprise three distinct classes: the "Agricultural Class," the "Boarder's Class," and the "Industrial Class." The "Agricultural Class," in conjunction with the other two classes receives instruction

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Rahan Model Farm.

by lecture and examination from half-past ten to eleven, during the first five days of the week, and they are occasionally conducted to the farm, to witness the operations going on. The "Boarder's Class" is now vacant. There are many applications for admission, but from a want of the proper qualifications, or a want of means to pay the admission fee, which is only £6 per annum, they have had to be rejected. This class is expected to be filled up in a short time. The "Industrial Class," the members of which work two hours daily for the first five days of the week, and three hours on Saturdays, still continues in a most cheering state, and the readiness with which vacancies are filled up, plainly shows the desire that prevails among parents and pupils to avail themselves of the advantages to be derived therefrom. It is to be remarked, that their attendance is more regular, and their progress more rapid than before they joined the class.

The instruction imparted comprises theory, so far as it bears upon practice; but practical instruction is the chief object of my exertions, and consists in an exposure of the errors of the old system of farming—the collection, management, preservation, and application of manures, the various modes of tillage, and improvement of soils, the sowing of all kinds of agricultural seeds, and the quantities to be used per acre under different circumstances. Rotations of crops as adapted to different soils, sizes of farms, &c. &c., and house-feeding the cattle, as compared with depasturing. In discussing the relative merits of the improved and old systems of farming, I cause the pupils to enter into minute calculations of what can be realized by both. From the knowledge which they have of the old system on their father's farms, and of the improved system as carried out here, they have such a proper understanding of both sides of the question, that they take a peculiar delight in the exercise of comparison, which I find to be useful and instructive in many ways. Thus instructed, I trust they will become enabled, in after life, to think and judge for themselves, and adopt or reject any system of farming as their experience will dictate to be suited or unsuited to their several circumstances.

I take this opportunity of tendering my best thanks to the patron Mr. O'Brien, and his Lady, for the great interest they take in forwarding the progress of the institution, and for their ready assistance on all occasions, to enable me to conduct the affairs of the farm, &c., &c.

It will be perceived from the following balance sheet, that the profits on the year's transactions have exceeded those of the former years. This is caused principally by the increased produce of the farm, but partly by the higher prices of farm produce, stock, &c. over those of last year. You will perceive that the receipts for the sale of cattle and pigs were

£23 8*s.*, and only £7 9*s.* 4*d.* paid for purchases. Also, when it is considered, that the farm is credited for every article of farm produce, &c. used in the house, it will not appear too high.

I remain, Sir, with great respect, your very obedient, humble servant,

PATRICK FLANAGAN.

Thomas Kirkpatrick, Esq. M.D.,
Agricultural Inspector.

Summary of the Year and Balance Sheet.

Dr.

	£	s.	d.
To Amount of Valuation at commencement of year, .	70	6	4
,, paid in Rent, Taxes, &c., ...	12	4	4
,, paid for Labour, ...	12	5	3
,, of Free Labour from pupils, . . .	5	0	0
,, paid for Seeds, &c., ...	6	2	8
,, paid for Cattle and Pigs, ...	7	9	4
,, paid for Implements and repairs of do., .	1	5	7
,, Profit and Loss for balance, being gain on the year, ...	45	10	2½
	£160	3	8½

Cr.

	£	s.	d.
By Amount received for Grain, ...	20	18	4
,, Potatoes, &c., . . .	5	17	4
,, Cattle and Pigs, . . .	23	8	0
,, Dairy produce, . . .	6	4	10½
,, Eggs and Poultry, . . .	2	4	11
By Amount of Dairy produce used in house, including Agricultural Boarders, . . .	12	6	8
,, Eggs and Poultry used by do., . .	3	18	9
,, 16 Geese used by do., ...	1	12	0
,, 10 barrels of Oats made into Meal, .	5	0	0
,, 1 ton 10 cwt. used by do., . . .	4	0	0
,, Garden vegetables used by do., . .	2	0	0
,, Valuation and Inventory taken at close of year, ...	72	12	10
	£160	3	8½

TABLE showing the CROPPING of the Rahan Model Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.				tons cwt. qrs.	£ s. d.	£ s. d.	
Winter Vetches,	0 1 30	October,	1st May to end of June	10 st. vetc. 2½ st. rye,	16 3 2	3 2 10	3 0 10*p.*	Commenced cuttings 1st of May.
Wheat,	1 0 34	15th December,	16th August,	9 stone,	6 barls. 7 st.	3 12 0	4 2 6*p.*	Red chaff, white variety.
Oats,	3 1 10	3rd to 20th March,	August,	11 stones,	13 barrels,	3 0 8	3 9 4*p.*	Hopetown and White Tartary. The latter was the heavier crop.
					tons cwt. qrs.			
Potatoes,	0 3 10	9th April,	September,	8 cwt.,	3 2 2	7 2 4	3 6 0*p.*	Kemps, Lumpers, and Cattle potatoes. The kemps produced best, then the cattle potatoes.
Clover and Italian Rye-grass,	2 1 2	24th April, 1851,	June,	2 bushels rye-grass, & 9 lbs. red clover,	3 11 0 1st cutting,	In Hay.		Commenced cutting for soil 13th May, and for hay 18th June.
Second crop,	2 1 2	—	End of July,	—	2 15 1	2 9 7	4 13 3*p.*	Cutting for soil 5th July, and for hay end of July.
Third crop,	1 2 0	—	September,	—	1 10 0			Cutting for soil 15th September. No hay saved.
Mangels,	0 1 25	8th May,	November,	2½ lbs.,	34 13 3	7 14 6½	13 12 10*p.*	Long Red and Yellow Globe, the latter a little heavier.
Swede Turnips,	0 1 25	12th May,	November,	2½ lbs.,	31 16 0	7 14 6½	12 4 6*p.*	Skirving's improved were re-sown 11th June.
Carrots,	0 0 32	14th May,	November,	6 lbs.,	15 14 2	7 3 10	12 9 3*p.*	White Belgian, 20 in. by 6 in.
Cabbages,	0 1 0	Feb. and August,	July and December,	3,600 plants,	20 8 0	7 3 10	8 4 0*p.*	Nonpareil, York, &c.
Dale's Hybrid Turnips,	0 1 30	10th July,	November,	2½ lbs.,	28 0 0	6 2 11	5 16 11*p.*	Sown after the Winter vetches were used.
Subject to inundation, and under meadow and grazing,*	2 1 10	—	—	—	—	—	—	

* Worth about the Rent.

(Signed), PATRICK FLANAGAN, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

January 6. JOSEPH FITZGERALD Manager.

Appendix K.

II. Appendix to Dr. Kirkpatrick's Report.

27. Dromiskin Model Agricultural School, County Louth.

1st January, 1853.

Dromiskin Model Farm.

Sir,—In obedience to your instructions, I beg leave respectfully to submit the following Report on the agricultural department of the above school, for the year ending 31st December, 1852.

Extent of Farm.—The farm contains 6a. 2r. 30p., Irish plantation measure, and was intended to have been worked on the four-course shift, but this rotation could not be effectually carried out on the whole farm at present, as a portion of it was in an exhausted state, and requires drainage. The drainage of this portion can be easily accomplished during the ensuing spring, as the Right Honourable Lord Clermont, the patron of the establishment, is at present deepening and widening the boundary drain on the south-east side of the farm. When this drain will be completed, all the low grounds on and about the Model Farm will be perfectly dry, and fit for tillage; and this boundary drain will act as a receiver for the parallel drains that I purpose making.

The course of cropping, last year, was as follows, viz.:—

No. 1.—*Oats*, 1a. 1r., succeeding clover and Italian rye-grass. During the month of June and the early part of July, this crop was most promising and luxuriant; but owing to the heavy rains, it lodged, and ripened very unevenly. The produce was about 18 barrels per Irish acre.

Immediately after the oat crop was removed, I had one rood of the ground ploughed, manured, deeply dug, and planted with large York cabbages, 2 feet, by 18 inches, apart from plants sown the second week in July. They now present a healthy appearance, and will be fit for use in April, when they are to be succeeded by a crop of turnips.

Barley, 1a. 1r. 12p.—This crop was sown after turnips and potatoes, and was laid down with the usual quantity of Italian rye-grass, with a small proportion of perennial, and red clover. The Italian rye-grass seed was saved by myself. The barley was a fair average crop, yielding about 17 barrels per acre. The meadow, at present, looks extremely well.

Potatoes, 1a. 1r. 23p.—The ground intended for this crop was deeply tilled, and well manured, and the seed planted in drills, except a small portion that was in ridges; and in order to test the different qualities of seed, I selected the following for planting, viz.:—Cruffles, Repealers, Ballygawley Pinks, Dukes, Yellow Legs, and Seedlings; and considering the great failure that attended the potato crop, each description I planted yielded a fair return—about 60 barrels per Irish acre. I think it worthy of notice, that there was none so extraordinarily productive as the Seedling, as I planted but 1 cwt., which produced 9 barrels, or 22½ cwt.

Italian Rye-Grass and Clover, 1A.—This crop was most luxuriant, yielding two heavy cuttings; and a small portion that was used for soiling yielded a third.

The division under turnips and mangel wurzel occupied 1A. 0R. 20P.. The former yielding at the rate of 28 tons, and the latter 40 tons, per Irish acre.

The mangels were raised on a peaty soil, the greater part of which I reclaimed last spring.

As the system of tillage and the after-management of the different crops grown upon the farm were nearly similar to those detailed in my first Report, I do not consider it necessary to particularize them at present.

In making out the "Statistics," and "Cropping of the Farm," also the "Farm Account Book," "Inventory and Valuation," and "Balance Sheet," of the year's account, the greatest care has been taken in estimating the acreable produce, and the average amount at the present market prices.

The "Paid Industrial Class" consists of six boys; and it affords me great pleasure in stating, that they still continue to do the light work of the farm to my entire satisfaction.

The "Agricultural Class" consists of 32 boys, who receive agricultural instruction, for half an hour, on the first five days of the week; they all show great willingness to study this important science. They are conducted by myself, during the hour of recreation, to see the different operations pursued on the farm; and I feel confident, that those young lads, who are now receiving instruction at this school, will return home with their minds richly stored with much useful information; and when they grow up into manhood, they will become intelligent farmers, and useful members of society.

Hitherto I was prevented from following a regular system of house-feeding, owing to the farm buildings not being completed; but I have now the satisfaction of stating, that both dwelling-house and offices are fitted up in a most suitable manner by the patron, and I expect to be living on the Model Farm very shortly.

General Remarks.—Each division of the farm has now undergone a regular course of "green cropping," with a fair application of manure, and it is at present in a most flourishing condition. The general management has been much appreciated by all the farmers who have visited the farm in the course of the year; and they have all seen how necessary it would be to follow a rotation that would be suitable to the soil; for it is only by some regular system of management that its fertility can be maintained.

In conclusion, I beg to express my gratitude to my noble patron, Lord Clermont, for the great interest he takes in the welfare of this institution, evidenced not merely in benevolent wishes for its prosperity, but in great and substantial benefits conferred upon it. I trust that the capital he has so liberally invested in providing useful instruction for his dependents,

will be returned to him with liberal interest in the increased prosperity and social elevation of his tenantry, and consequent increased and better secured income to himself; and I am convinced, that if other proprietors, who may have the means, would act in the same spirit of improvement, the agriculture and the prosperity of this country would be vastly improved.

I remain, Sir, your very obedient servant,

PATRICK QUINN.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

BALANCE SHEET for the Year ending 31st December, 1852.

Dr. EXPENDITURE.	£	s.	d.
To Amount of Valuation at commencement of year,	89	16	6
,, paid in Rent, Taxes, &c.,	14	9	5
,, paid for one Cow,	11	0	0
,, ,, Seeds, Manure, &c.,	9	12	6
,, ,, Dairy Utensils,	1	10	0
Miscellaneous Expenses, including Pig feeding, Smith work, Straw, &c.,	4	12	0
To Amount paid for Horse and Manual Labour,	23	4	10
,, of Free Labour from Industrial Class,	2	17	0
To Profit and Loss, for gain on the year,	17	9	3
	£174	11	6

Cr. RECEIPTS.	£	s.	d.
By Amount received for one fat Cow,	9	10	0
,, ,, for Pigs,	17	0	0
,, ,, for Dairy Produce,	5	0	9
,, ,, for Dairy Produce used by family,	4	1	0
,, ,, for Potatoes used by family,	2	15	0
By Amount of Valuation at close of Year,	136	5	6
	£174	11	6

TABLE showing the CROPPING of the Dromiskin Model Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Oats,	2 0 3	1st week in April,	August,	14 stones,	11 barrels,	3 18 0	2 3 0*p.*	
Barley,	2 0 13	3rd week in April,	August,	15 stones,	10 bar. 8 st.	4 10 0	2 6 0*p.*	
Potatoes,	2 1 0	March and April,	2nd and 3rd week in October,	5 barrels,	37 barrels,	9 10 0	5 6 1*p.*	The tubers, with very few exceptions, were all sound.
Italian Rye-grass and Clover,	1 2 19	April, 1851,	1st cutting June & 2nd in September,	Rye-grass 2 bushels, and clover 7 lbs.,	3 tons,	3 0 0	2 0 0*p.*	A small portion cut for soiling, the remainder for hay.
Turnips,	0 3 8	1st week in May	Not yet lifted,	4 lbs.,	18 tons,	9 10 0	2 18 0*p.*	
Do.	0 0 33	& last week in May						
Mangel Wurzel,	0 3 9	1st week in May,	3rd week in Nov.,	4 lbs.,	25 tons,	10 0 0	6 13 4*p.*	Peaty soil.
Carrots,	0 0 16	3rd week in March,	2nd week in October,	6 lbs.,	12 tons,	11 0 0	2 10 0*p.*	
Cabbages,	0 0 27	3rd week in March,	Used occasionally for cattle and domestic use,	—	11 tons,	10 0 0	2 10 0*p.*	
Parsnips,	0 0 6	2nd week in Mar.,	Last week in Nov.,	6 lbs.,	—	10 0 0	2 10 0*p.*	
Cabbage plants,	0 0 6	Different sowings in July & Aug.,	—	—	—	—	—	

(Signed), PATRICK QUINN, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief.

4th January. THOMAS CALLAN, Manager.

28. Ballinakill Central Model Agricultural School, County Galway.

Ballinakill Model Farm.

31st December, 1852.

Sir,—In accordance with your instructions, I beg to forward a Report on the Agricultural Department of the above School, together with the Balance Sheet of the farm accounts for the year ending the 31st December, 1852; and to submit a statement of the crops grown on the farm during the past year, with the mode of cultivation pursued, and the amount of produce raised. The portion of land at present cultivated as a Model Farm contains 9a. 0r. 23p. statute measure, and is divided into five equal parts, to suit the five-course rotation, which is here followed. It will be increased next year to 12 acres, and will be divided into four equal parts, on which a four-course rotation will be exemplified.

The farm was cropped this year as follows:—1st field, Italian rye-grass and clover; 2nd, oats laid down with grass-seeds and clover; 3rd, turnips, mangel, parsnips, and carrots; 4th, oats; 5th, potatoes.

No. 1 *Field*, 1a. 2r. 30p.—This field was laid down with Italian rye-grass and clover, with the oat crop, in the spring of 1851. I commenced cutting the rye-grass on the 20th April, with which I house-fed three cows and one heifer up to the 20th of September. This field was cut three times during the season, and produced 34 tons—being cut and weighed when in flower—and 1½ tons of hay from the second cutting of a portion of the field. I also have 6 bushels of genuine seed, which at seed merchants' price, 7*s.* per bushel, amounts to £2 2*s.* The seed from the second crop is much better and more genuine than that procured from the first cutting, as it is free from other varieties, owing to its rapid growth and early maturity. It is pleasing to perceive how anxious the farmers of this country are to sow the cultivated grasses; and were it not for the distressed state of the inhabitants during the past seven years, from the example set them, and the desire they evince to carry out an improved system of cultivation, I consider they would have been, ere this, far in advance of their predecessors.

No. 2 *Field*, 1a. 2r. 30p.—This field, which was under a manured green-crop the previous year, was sown with oats, Italian rye-grass, and clover, about the middle of February. The oats (English white Holland) was sown broadcast, at the rate of 10 stones per statute acre, getting two turns of the harrow on the length, and one on the cross of the field. The land was then rolled, in order to leave an even bed for the grass-seed and clover, which were immediately covered with a light seed harrow and roller. The Italian rye-grass is at present 14 inches high.

No. 3 *Field—Green-crops*—1a. 2r. 30p.—As soon as the

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Ballinakill Model Farm.

corn was removed from this field, in September, it was trenched about 16 inches deep, and from the great quantity of the subsoil brought up at intervals, it can hardly be conceived how difficult it was to reduce it to a sufficiently pulverized state for the reception of small seeds. Early as it was trenched, I was obliged to plough and harrow it five times, and roll it repeatedly, before it could be reduced to proper tilth. The mode of culture adopted in raising the green-crops in this field was the same as explained in my former Reports; I therefore consider it unnecessary to give the details at present. The annexed Table shows the amount of produce raised, the time of sowing and planting, and the quantity of seed per acre.

No. 4 *Field* (*Oats*), 1A 2R. 30P.—The soil for this crop was dug eight inches deep in the month of November. At the time of sowing the seed I applied eighty cart-loads of marl, which produced a most luxuriant crop—22 barrels per Irish acre. When marl is applied shortly after it has been raised, it is very little benefit to either the land or crops for the first year. From several experiments on the application of marl, I found that the drier it could be made the greater its efficacy, both in improving the texture of the soil, and acting as a mineral manure. This shows the necessity of raising it as early as possible in summer, and of turning it over two or three times during the season.

No. 5 *Field*—1A. 2R. 30P.—By a close attention to the collection and management of manures, I was enabled to plant a crop of potatoes in this field. The land being heavy and retentive, I could not have it sufficiently pulverized at an early period of the year, consequently I was obliged to plant the potatoes in beds. The success of this crop chiefly depends on early planting, in order that the tubers may arrive at maturity previous to the time when the blight usually makes its appearance. After the potatoes were taken up in October, I dug and cleaned the soil, and transplanted rape, in drills 2 feet apart, and 12 inches plant from plant.

Live Stock.—All the farm animals are house-fed. The cows are cleaned, bedded down, and fed, at 6 o'clock, A.M.; they get six feeds daily, alternating green or cooked food with hay or fresh straw.

Agricultural Class.—I have much pleasure in stating that the pupils receiving agricultural instruction in this and the "Irish Wasteland National School," at several public examinations, have evinced an extensive knowledge of agriculture and the sciences connected with it. In my last Report I mentioned that the pupils in the "Industrial Class" had each of them a small plot of land given them by their parents. These plots were trenched last winter, and well prepared for a crop of turnips. The emulation which has been evinced among them was most praiseworthy, each strenuously endeavouring to raise the greatest amount of produce; and after due inspec-

tion, I am happy to say, that the cultivation would have done credit to abler hands. When those young cultivators become occupiers of land themselves, it is more than probable that the useless and crooked fences will be removed, the land properly drained and deepened, a regular course of cropping carried out, and that the half-starved cow shall no longer be allowed to roam over bare pastures without either a sufficiency of food or of shelter.

I am, Sir, your obedient servant,

JOHN CAMPBELL, Teacher.

To Dr. Kirkpatrick,
Agricultural Inspector.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Ballinakill Model Farm.

BALANCE SHEET.

FARM ACCOUNT from January, 1852, to January, 1853.

Dr. EXPENDITURE.	£	s.	d.	*Cr.* RECEIPTS.	£	s.	d.
To amount of Stock and Produce on hands at commencement of year,	119	19	7	By cash for Grain sold,	18	14	6
,, paid for Labour,	12	12	2	,, for pigs sold and used in house,	18	6	0
,, one Year's Rent,	6	17	6	,, Dairy Produce sold,	3	16	4
,, paid for Cattle and Pigs,	9	18	3	,, Do. used in house,	8	1	9
,, paid for Seeds,	1	17	4	,, Eggs sold,	0	4	8
,, paid for repairing Implements,	0	2	6	Amount of Valuation at close of year,	138	1	5
,, gratuitous Labour of pupils,	2	10	0				
To Profit and Loss for Balance, being gain on the year,	33	7	4				
	£187	4	8		£187	4	8

TABLE showing the CROPPING of the Ballinakill Model Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied. A. R. P.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre. tons cwt. qrs.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c. £ s. d.	Profit or Loss per Statute Acre on the Culture. £ s. d.	Observations.
Swedish Turnips,	1 0 0	20th May,	10th November,	3 lbs.,	26 5 0	5 12 0	8 6 1*p.*	
Aberdeen Turnips,	0 2 0	1st June,	1st November,	3 lbs.,	24 4 2	5 12 0	7 6 8*p.*	
Potatoes,	1 2 30	14th February,	20th September,	10 cwts.,	3 12 0	7 0 0	3 3 9*p.*	One-third unsound.
Parsnips,	0 0 12	20th March,	20th October,	6 lbs.,	22 0 0	9 12 0	21 10 2*p.*	From this return it can be seen that the acreable amount of produce has been greatest on the smallest plots.
Carrots,	0 0 2½	10th April,	25th October,	5 lbs.,	24 0 0	9 12 6	23 12 6*p.*	
Cabbages,	0 0 14	2nd March,	20th December,	8,712 plants,	40 6 2	9 10 0	24 15 8*p.*	
Mangels, long red,	0 0 15	24th April,	4th November,	3½ lbs.,	28 0 0	6 17 0	13 11 0*p.*	The globe varieties are less liable to run to seed than the long red.
,, red globe,	0 0 15	25th April,	4th November,	3½ lbs.,	24 12 2	6 17 0	11 5 0*p.*	
Oats,	3 1 20	28th February,	24th September,	10 stones,	1 1 3	2 14 0	3 10 5½*p*	

(Signed), JOHN CAMPBELL, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

5th January, 1853. EDWARD HOWE BURKE, Manager.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Ballinakill Model Farm.

Appendix K.

II. Appendix to Dr. Kirkpatrick's Report.

Loughrea Model Farm.

29. Loughrea Model Agricultural National School, County Galway.

January, 1853.

Sir,—I beg to forward the following Report on the Agricultural department of this School, together with the Farm Account Book and Returns for the year 1852.

The extent of the farm, quality of the soil, and course of cropping followed, being stated in my former Report, I consider it unnecessary to insert a repetition of them here, as no change has been made in these respects.

The stock on the farm up to December, consisted of two cows and two pigs. The cows (except an hour or two each day for exercise) were house-fed on turnips, cabbages, and clover, generally getting one of their six feeds cooked daily. The pigs were constantly confined to their yard, and were fed on the refuse of the kitchen, boiled turnips and cabbages, mixed with a few quarts of sour milk, and a drink of the same after each feed. In the absence of turnips and cabbages, they throve well on clover alone, and brought a remunerating price when sold, on the 4th of December last. When speaking of the cows, I should have remarked, that the small dairy produce exhibited in the balance sheet is not the criterion by which to judge the profit of these animals for this year; as one of them has been dry since October, and the other is to calve in this month.

The stock on the farm at present consists of two cows, one heifer, and a calf; it would be greater, were it not that the farm offices are limited in size, and of rather an inferior description, particularly the piggery; and the byre is not capable of containing more than three cows, and has never been properly fitted up. These defects I intended to remove last summer; but understanding that it is in contemplation to enlarge the Model Farm, and as such enlargement would necessitate a total change in the arrangement of the offices, I did not make any alterations pending a final decision on the matter.

I regret to say that there is not an "Agricultural Boarder's Class," nor a paid "Industrial Class," yet established in this school. The number in the "Agricultural Class" at present is 16, chosen from the most advanced of the day pupils, over ten years of age. Since I came here, some boys from this class were admitted as free pupils at the Glasnevin Model Farm, which had the effect of increasing the number in the Agricultural Class here. Some who afterwards were not successful enough to gain admission to that institution, left this in last summer, and are now conducting National Schools, &c. The present class (with a few exceptions) consists of a number of pupils lately admitted, and who are rather backward in their literary and agricultural acquire-

ments. They are employed one hour each day in the operations of the farm, during which they work cheerfully and attentively. In addition to the usual school course, half an hour is devoted to agricultural instruction each day in the week, except Saturday. The attendance is small, there being no less than three National, and five other schools, all within the distance of a mile from this, except one which is two miles distant.

Cropping.—The different crops cultivated this year, and the extent under each, will be seen in the Table of Cropping appended to this Report. With the exception of "oats on lea," which was below an average (it produced but 9 barrels per statute acre), all the crops succeeded very well; the turnips and potatoes were pronounced by all who visited the farm, to be much superior to any others in the neighbourhood.

The people of a mountainous district, in going to their market town (Loughrea), pass by this farm, and frequently apply here for information respecting the cultivation of their crops, and how to prevent failure of their turnips, &c. I have observed, this year, that the old practice of taking three and four grain crops off the same field in succession, is giving way in this neighbourhood to "alternate husbandry." Green crops are more extensively grown, drill husbandry seems to be more duly appreciated and practised by the surrounding farmers.

In conclusion, I beg to remark, that were the arrangements as to the proposed alteration and enlargement of the buildings effected, I have no hesitation in expressing my firm conviction that they would be productive of the most beneficial results to this locality.

I am, Sir, your obedient servant,

HENRY BROLLY.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Loughrea Model Farm.

BALANCE SHEET of FARM ACCOUNTS for the Year 1852.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To amount Valuation, at commencement of year,	35	11	7	By Amount received for Grain,	21	14	0
,, Rent and Taxes,	10	19	5½	,, Potatoes and Roots,	3	16	4
,, Seeds, Lime, and Manures,	5	19	4	,, Cattle sold,	27	13	0
,, paid for Cattle,	20	12	6	,, Dairy produce,	5	11	8
,, paid for Implements and Repairs,	1	12	6	,, Eggs and Poultry,	3	6	7
,, paid for Labour,	7	12	10	,, Inventory and Valuation taken at close of the year,	53	0	6
,, Free Labour of Pupils,	1	15	0				
,, Labour of Teacher,	5	0	0				
,, Profit and Loss for balance, being gain on the year,	25	18	10½				
	£115	2	1		£115	2	1

TABLE showing the CROPPING of the Loughrea Model Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Turnips, Swedes,	1 0 5	19th & 20th May,	23rd and 24th Dec.,	6 lbs.,	28 tons,	8 10 0	6 7 8*p.*	Tops not included.
,, Aberdeen,	0 0 25							
Potatoes,	0 2 5	Last week in Feb.,	October,	10 cwts.,	6 tons, 8 cwt.	7 10 8	5 17 4*p.*	In drills—Maiden Blushes, Cork Reds, Ash-leafed Kidneys, and Leather Coats; scarcely one-tenth of the whole damaged, and only about one-twentieth of the Maiden Blushes.
Oats,	3 1 30	1st March,	September,	12 stones,	9 barrels,	2 10 6	1 19 0*p.*	
Clover & Grass for soiling,	1 2 35	1st week in March,	From middle of May to October,	8 lbs. clover, 4½ st. ryegrass	Not ascertained,	2 0 0	—	
Grass, 2nd year, meadow,	1 2 35	—	July,	—	1½ tons,	1 5 0	1 10 0*p.*	
Parsnips,	0 0 15	1st week in April,	October and Nov.,	7 lbs.,	Not ascertained,	7 10 0	—	In garden.
Carrots,	0 0 10							
Cabbages,	0 0 15	Different times,	Various,	—	—	8 0 0	—	In garden.

(Signed), HENRY BROLLY, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief.

18th January, 1853. P. BLAKE, Manager

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Castlehacket Model Farm.

30. CASTLEHACKET MODEL AGRICULTURAL SCHOOL, County Galway.

January 6, 1853.

SIR,—In submitting my second annual Report, on the Castlehacket Model Agricultural National School, I am happy to be able to inform you, that its progress for the past year has been very satisfactory. Both the school and farm have maintained the character which you were pleased to bestow upon them a year ago; and several respectable visitors have since borne testimony to their usefulness, in very flattering terms indeed. Amongst others, Mr. Brogan, Sub-Inspector of Agricultural Schools, in his observations in the Report Book on his recent visit, writes thus:—"I was much gratified with what I saw of this most efficiently conducted school, which is one of the best I have examined since I entered on the duties of Inspector." To me it is a source of sincere gratification to find my humble endeavours thus appreciated by one who knows so well the arduous duties of an agricultural teacher.

Hitherto the "five-course rotation" has been followed upon this farm; but Mr. Brogan, at his late visit, suggested a change, in which I also entirely concur, and which I have reason to think will be attended with material advantages. Both this and other valuable suggestions of his are at present under the consideration of the Manager, who, I am sure, will pay that attention to them which they deserve.

The farm being now all subsoiled, there is nothing to report on, in the way of permanent improvements, this year. A new range of sheds, however, for the purpose of affording increased accommodation have been erected—they will serve for wintering cattle or storing roots; indeed, I may say, that the manager spares neither trouble nor expense upon any thing connected with the school or farm which may tend to render them more useful and efficient. The crops cultivated, for the past year, were potatoes, turnips, parsnips, carrots, flax, peas, and oats, together with some garden vegetables. The return, upon the whole, was pretty fair; and, taking into account soil and situation, better, perhaps, in some instances, than could have been expected. The only crop with which I could find fault was the pea. Both last year and the year before, it has been struck with some kind of blight, similar to the potato. In the beginning of July, the leaves and stalks became spotted with a brownish tint, as if they had been burned with vitriol, and from that period up to the time of reaping, the crop declined every day. I have observed something of the same kind upon the leaves of the parsnip also.

My potato crop was very good. The description planted, was the "Green-top" or "Protestant." They resisted the effects of the blight wonderfully, and preserved their luxuriant

green appearance up to the latter end of August, although planted in February and March. The tubers also were quite free from disease, the number injured being merely nominal. They are a very excellent description of potato, mealy and well flavoured; and although they do not grow to a very large size, they make up for the deficiency by their number being very numerous in the ground.

Influenced by the very encouraging promises and calculations of the Belfast Flax Society, I, in conjunction with a number of my neighbours, resolved to give the flax crop a fair trial, not doubting, but, as was promised, a market would be opened for it in Galway, as soon as it would be ripe. I am sorry to say that we were mistaken, and that the crop has been left on our hands. It will, however, teach a useful lesson to the farmers in the west of Ireland, not to rely too implicitly on the faith of any society, nor to receive, *as fact*, the mere speculative theories of over-sanguine individuals. A glance at the geological construction of this county will serve to show that at least a large portion of it is unfit for the growth of flax. The rock approaches, in many places, to within a few inches of the surface; in others, as in this district, water, to steep the fibre, is at such a distance, that the carriage to and from it, and the labour consequent thereon, would more than absorb the profit. My impression, when sowing it, was, that it would be purchased from us in its *green* or *raw* state, at Galway; but as we have seen this is not the case, I have taken off the seed, and stacked the straw, until summer, when I must try to get it manufactured; though, for the reasons mentioned above, I am almost sure the value of the material, when prepared, will hardly cover the expenses. I had heard and read a great deal about growing carrots along with flax, and wishing to see how the two crops would do when sown together, I tried the experiment after the following manner:—Having prepared the soil properly, and sown the flax, I caused furrows to be opened with the spade, at the distance of 2 feet, and into these I put a small share of guano and peat mould, mixed together; I then covered up, or filled the trenches again, and sowed white Belgian carrot seed in little tracks, made by a stick on the surface. The flax came up as evenly as if it had never been disturbed; and in the course of time the carrots also made their appearance. Both crops got on very well for some time, and I was beginning to hope that there would be a fair return of each; but as the flax advanced to maturity, I found that the carrots died away, being choked by the weight of the other crop. As soon as the flax was pulled, I dug and hoed about the carrots, but all I could do did not cause them to come forward as I expected. I have little doubt, however, but that if the soil was strong and rich, and the flax pulled in July, without waiting for the seed to ripen, there would be a fair return

of carrots. There is another crop which I think would do better with flax than carrots—it is rape.

I believe it is unnecessary to enter into a detail of my other crops. They were grown in the usual manner. My turnips were hardly as good this year as last. The manure applied was superphosphate of lime, and I have reason to think it was not quite pure; otherwise there was something in the soil which acted prejudicial to it.

Fourteen pupils have been receiving agricultural instruction at this school during the past year; and I am happy to be able to inform you, that they evince the most earnest desire for improvement. Many display considerable talent, and I make no doubt, will become useful members of society. There is also an "industrial class," of six, paid by the Board. They receive sixpence per week for their services; and it is a source of much pleasure to witness how cheerfully and willingly they labour on the farm during the hours appointed for their attendance. I have but one agricultural boarder, but I trust I shall be shortly in a condition to receive a few more. Of the influence of this school upon the agriculture of the neighbourhood, I think it unnecessary to speak: it is sufficient to say, that children who are so willing to work for me, cannot, I think, be idle at home; and as they will convey into their several dwellings the instruction they receive here, there is little doubt but they will, in their time, become useful diffusers of instruction. The labour account for the past year appears small; but it must be borne in mind, that the farm is mostly worked by spade husbandry; and that having a father and a brother who, as well as myself, are daily employed on it, I have not to *pay* much for labour. This, of course, causes a difference in the general balance, to what might be the amount of labour necessary for a farm of the same extent as mine.

I beg to conclude, by expressing a hope, that through the instrumentality of the agricultural schools, and the general diffusion of useful and practical agricultural knowledge throughout the country, Ireland may shortly be able to take a place amongst the first agricultural countries in the world.

I am, Sir, your most obedient, humble servant,

Arthur Gough.

Thomas Kirkpatrick, Esq., M.D.,
Inspector of Agricultural Schools.

BALANCE SHEET of Castlehacket Model Farm.

Dr. EXPENDITURE.	£	*s.*	*d.*
To Amount of Valuation at commencement of the Year,	43	4	0
,, Rent,	6	5	0
,, paid for Seed, Manure, &c.,	11	7	7
,, ,, Cattle, this year,	20	9	0
,, ,, Labour,	4	7	0
Profit and Loss, being gain on the transactions of the year,	5	4	0
	£90	16	10

RECEIPTS. *Cr.*	£	*s.*	*d.*
By Amount received for Grain,	6	11	6
,, ,, for Roots,	5	8	6
,, ,, for Cattle sold,	19	6	6
,, ,, for Dairy Produce,	6	4	0
Amount of Inventory and Valuation taken on the 31st December, 1852,	53	6	4
	£90	16	10

Table showing the CROPPING of the Castlehacket Model Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Potatoes,	1 2 0	March,	October,	90 stones,	600 stones,	7 0 0	3 0 0*p.*	
Turnips,	1 3 0	May and June,	December,	6 lbs.,	20 tons,	6 10 0	3 10 0*p.*	
Peas,	1 1 0	March,	September,	16 stones,	6 cwts.,	3 0 0	0 12 0*l.*	This crop has been struck by blight both this year and last year.
Oats,	3 3 0	March,	September,	16 stones,	110 stones,	2 0 0	1 5 0*l.*	
Clover and Grasses,	2 1 0	April,	Soiled,	—	—	—	—	
Flax,	0 2 0	April,	August,	12 stones,	6 tons,	4 4 0	4 0 0*p.*	Although a theoretical calculation gives an apparent gain, as above, I believe, when I shall have performed every requisite operation upon the crop, there will be a loss, in consequence of the want of a proper market, and proper hands to work the fibre.
Carrots,	0 0 20	March,	December,	6 lbs.,	600 stones,	7 0 0	2 15 0*p.*	
Parsnips,	0 0 20	March,	December,	6 lbs.,	—	7 0 0	2 10 0*p.*	
Mangels,	0 0 20	April,	November,	8 lbs.,	20 tons,	7 5 0	4 0 0*p.*	
Cabbages,	0 0 10	Feb. and March,	Eaten through the Summer,	—	—	—	—	
Garden Vegetables,	0 0 4	March,	—	—	—	—	—	

(Signed), ARTHUR GOUGH, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief.

6th January, 1853.

DENIS KIRWAN, Manager.

31. BALLYCARRY MODEL AGRICULTURAL SCHOOL, County Antrim.

Ballycarry Model Farm.

December, 1852.

SIR,—Agreeably to your instructions, I beg to transmit my returns and Balance Sheet of the farm accounts for the year ending the 31st October, 1852, and also a brief statement of the management of the farm, and its results.

In my Report for the previous year (1851) I detailed the nature of the soil and the rotation of cropping adopted, which is at present the four-course shift; but as many important alterations have been tried, I shall endeavour to state them as briefly as possible.

For a considerable time I felt the want of a vegetable garden, for culinary purposes, and as a means for further instruction to the pupils. Accordingly, early in spring I set about forming one, by laying off about 60 perches, statute measure, adjoining the school, and lying beside the mail-coach road, for this purpose.

Cropping—Potatoes.—As these were planted early in February and March, they were in so forward a state that, notwithstanding the ravages of the disease, a considerable quantity of them was saved. The kinds most free from disease were white seedlings and M'Mullans.

Mangel.—The preparation of the ground for this crop consisted in having it deeply dug as soon as possible after the removal of the previous stolen crop (rape). The mangel was sown early in May. The work was chiefly done by the "Industrial Class," under my own superintendence. My method of sowing consists in first making a small rut in the crown of each drill, with the corner of a hoe or some such instrument, in a similar manner to that which is done in sowing turnips. By this method we insure a more regular braird, the plants being all one depth; and as seed is cheap, we can cull them when thinning, and transplant, as occasion requires, with great advantage. I generally steep the seed from 36 to 48 hours, —never longer—and afterwards spread it out to dry, frequently turning it, until all the moisture is completely evaporated, which, with moderate heat, will require about four or five days. Then it is steeped a second time, and allowed to remain about 16 or 18 hours, and afterwards laid out in a colander for two days, when symptoms of vegetation may be clearly perceptible. For years I have tried this method, and have seen no reason to abandon it. It is worthy of trial, and many farmers in this neighbourhood have had a certain crop this season from obeying my directions in thus preparing the seed.

Carrots.—The preparation of the soil for this crop was duly attended to. The kinds sown were the Altringham and Belgian. The produce was enormous, being 50 tons to the Irish

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Ballycarry Model Farm.

acre. One carrot weighed 5½ lbs., haulm included. They were sown during the last week of March.

Parsnips.—The soil was treated in a similar manner as for the other green crops, but owing to the soil in which they were sown being shallow, the crop was not so luxuriant as I had anticipated; still they were more than an average crop.

Winter Vetches.—I had about one rood and a-half of this crop, which succeeded very well, so that many farmers were attracted by their luxuriance. The spring vetches did not do so well. Where winter vetches grew, turnips were put in; but, owing to excessive heat at the time of sowing, vegetation was retarded; still, by using artificial means, the crop was over an average. The kinds sown were Skirving's Swede, and purple and green-topped Aberdeen.

Beans, Peas, and Onions.—The total space occupied under these crops was only about 4 perches; as they were designed for the use of the house, this was considered sufficient. The kind of bean sown was the hang-down Turkey pod; peas—Bishop's early frame, early green, marrowfat, and Knight's dwarf. The Strasburgh and potato onions were the only kinds sown or planted here this season.

Oats.—The kind sown was the early Angus. The grasses sown at the same time with the oats were Italian perennial and broad-leaved clover. The proportions of the grass-seeds were—Italian grass, 2 bushels; perennial, ¾ bushel; and 12lbs. of clover, per acre. The grass is now so luxuriant, that it might be cut at present.

Manure.—This indispensable appendage to profitable farming is regularly attended to, weekly carted out to the section of ground designed for green-crops, and either dug in immediately, or piled up, carefully covered, and occasionally watered from the tanks, thus enriching as well as increasing it. The quantity of manure is admired by many of the respectable farmers who frequently visit us. It is a fact, that by our system of house-feeding we have more manure than many farmers who keep three times the same number of stock. This, in itself, speaks volumes in behalf of house-feeding the cattle

Live Stock.—The farm is now well able to support the amount of stock kept on it, viz., 3 cows, 1 calf, 1 pig, and a donkey. The "house-feeding" system is strictly followed, and with the most beneficial results.

The School is progressing, both in efficiency and popularity. We were visited during the year by gentlemen of all shades of opinion, who warmly eulogized this establishment, as likely to confer great benefit on this populous and intelligent neighbourhood. On the 6th and 7th October, T. M. Birnie, Esq., J.P., Carrickfergus, with the Rev. Messrs. G. T. Payne, J. Stuart, W. Glendy, and T. O'Gorman, held an examination, for the purpose of distributing the premiums annually given by E. Senior, Esq., Poor Law Commissioner, and formerly Manager of this school. The Agricultural and 1st Grammar

Ballycarry Model Farm.

Classes distinguished themselves very creditably. I feel great regret at being deprived of Mr. Senior's valuable patronage of this school, in the prosperity of which he always evinced great interest.

The friendship of W. R. Anketell, Esq., J.P., continues unabated; he always shows a great regard for the welfare of this school. D. S. Ker, Esq., M.P., the landlord of this estate, deserves great praise from the people in this district for the very handsome edifice he has erected, at very large expense, for their benefit. Much good has already been effected. Three boys distinguished themselves during the last year; one has been admitted to Glasnevin establishment; a second is teaching a school in this locality; and the third is acting as shopman in Belfast. It is a remarkable fact, that the boys who generally excel belong to the "Industrial Class," which is working most satisfactorily in this school.

I have the honour to be, Sir, your very obedient servant,

MATTHEW M'KEE.

Thos. Kirkpatrick, Esq., M.D.,
Agricultural Inspector, &c., &c.

[SUMMARY, &c.

SUMMARY of the Year and BALANCE SHEET.

Dr.

	£	s.	d.
To Amount of Valuation at commencement of year,	65	2	10
,, paid for Rent, Taxes,	9	12	9
,, ,, Seeds, Lime,	9	1	8
,, ,, Cattle during the year,	8	17	0
,, ,, Implements and Repairs,	4	4	1
,, ,, Labour,	12	13	6½
To Free Labour of "Industrial Class,"	5	4	0
To Profit and Loss, profit on the year,	24	6	0½
	£139	1	11

Cr.

	£	s.	d.
By Amount received for Grain,	5	3	6
,, Potatoes, Roots, &c.,	16	4	6
,, Cattle,	14	11	5
,, Dairy produce,	17	12	9
,, Eggs and Poultry,	2	10	11
By Amount of Valuation at close of year,	82	18	10
	£139	1	11

TABLE showing the CROPPING of the Ballycarry Ordinary Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.			cwt. qrs. lbs.	cwt. qrs. lbs.	£ s. d.	£ s. d.	
Oats,	3 0 20	April,	Sept. and October,	1 2 0	9 2 11 Meal. 45 1 0 Straw.	5 9 0	1 2 2*p.*	
Mangel,	0 1 8	May,	December,	0 0 8	tons. cwt. qrs. 24 2 3	11 10 4	15 19 8*p.*	
Potatoes,	0 3 20	March and April,	October,	15 0 0	6 10 0	10 10 0	8 13 4*p.*	Only about 13 per cent. diseased.
Turnips,	0 3 20	May and June,	December,	6 lbs.,	27 15 0 Roots. 6 5 0 Haulm.	12 10 0	11 13 4*p.*	
Cabbages,	0 1 2	March and April,	Not all yet used,	8,000 plants,	22 10 2	3 4 0	10 16 0*p.*	The most part of this crop was raised in the furrows of the potato ridges, therefore the estimated expense is not great.
Carrots,	0 0 3	March,	November,	4 lbs.,	26 13 0	14 0 0	69 5 0*	
Parsnips,	0 0 3	March,	November,	5 lbs.,	21 16 0	14 0 0	60 16 0	This crop sold at 3*s.* 6*d.* per cwt.
Onions,	0 0 1	Jan. Feb. & Mar.,	July and November,	2 cwt.,	12 0 0	18 0 0	57 0 0	
Beans,	0 0 1	February,	October,	5 bushels,	2 3 0	10 0 0	5 0 0	
Peas,	0 0 2	March,	October,	5 bushels,	—	2 0 0	—	
Grass,	1 3 12	April, 1851,	Cut as required,	—	3 cuttings,	2 10 0	4 10 0	
					tons. cwt. qrs.			
Vetches, Winter,	Stolen Crops.	September, 1851,	June,	4 bushels,	30 7 2	1 10 0	6 0 0*p.*	This being a stolen crop, no rent is to be charged.
Do., Spring,		March, 1852,	July and August,	4 bushels,	18 1 0	2 19 0	4 0 0	
Rape,		Transplanted in Sept., 1852,	April,	—	—	—	—	
Avenues and Walks,	0 0 8	—	—	—	—	—	—	
Total,	7 1 20							

* The Carrots, Parsnips, and Winter Vetches, were the best crops I had during the season.

(Signed),
MATTHEW M'KEE, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief, having only arrived in the District.
S. W. GODDARD, Manager.

10th July, 1853.

Appendix K.

II. Appendix to Dr. Kirkpatrick'sReport.

Taniokey Model Farm.

32. Taniokey Ordinary Agricultural National School, County Armagh.

January, 1853.

Sir,—I beg to submit to you a brief Report on the Agricultural department of the above School for the year 1852.

The farm connected with it contains 4 acres, 2 roods, of which 4 acres are available for cultivation, the remainder being occupied by boundary fences and a drain. When I entered on it, it was in a very bad state, being much exhausted and foul with weeds. I had it all ploughed in the month of February, and early in the month of March had 2 roods prepared for potatoes. I planted the potatoes in the end of March, in ridges five feet broad, with two-feet furrows. They looked well till early in July, when they were attacked by the disease. The produce was but 50 cwt. of sound tubers per statute acre.

I next sowed 2 acres with oats on the 23rd March; it yielded at the rate of 15 cwt., 2 qrs., 2 lbs. per statute acre. I sowed 3 roods with 1½ bushels of flax-seed, laid down with grass and clover seeds; the flax turned out a very bad crop, the ground being too wet. I would not have sowed it but with a view to get into the rotation, and have grass and clover for soiling next season, and knowing that when oats, or any other grain crop, were sown on the same land, it lodged and smothered the grass. But I will be remunerated for the bad crop of flax by the grasses, which now look most promising.

The next 3 roods I prepared for turnips, by ploughing first in February, and cross ploughing in the beginning of May, harrowing, rolling, and grubbing several times, each time picking all the weeds turned up. I then formed the drills 30 inches from centre to centre; and, as I had no farm-yard manure, I had to use guano. I levelled the tops of the drills with a fork, sowed at the rate of 5 cwt. of guano per statute acre, afterwards splitting the drills to cover the manure, then rolled, made a rut along the top of the drills, sowed the seed, covered with the back of a shovel, and rolled lightly with a hand-roller. The after-culture consisted in thinning, hoeing, weeding, digging between the drills, &c. They turned out a fair crop, producing 24 tons per acre.

Agricultural Instruction.—All the fourth class boys are taught the theory of Agriculture in the school from half-past two o'clock to three o'clock on five days of the week. Some of them work occasionally on the Model Farm. No "Industrial Class" has yet been established in this school. I paid one boy 1s. per week, but he has emigrated to America. I cannot afford to pay boys a shilling a week myself, and they will not work for less; so if the Commissioners would be pleased to grant a small annuity for this purpose, it would materially promote the welfare of the agricultural department.

Live Stock.—I was only able to keep one cow last year, which I fed mostly in the house by grass cut round the farm, turnip tops, &c.; but I intend to keep two cows, a heifer, a calf, and a pig or two this year.

Taniokey Model Farm.

In conclusion, I have the pleasure to inform you that P. Quinn, Esq., agent to Colonel Close, on whose estate this school stands, has purchased, and will appropriate as a Model Farm the lands at the rere of the school, which are very suitable for the purpose, so I trust to be able to give a much more favourable account of our proceedings for the coming year.

I have the honour to be, Sir, your very obedient and humble servant,

WILLIAM M'CULLA.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Taniokey Model Farm.

BALANCE SHEET of Farm Accounts for Year ended 31st December, 1852.

Dr. EXPENDITURE.				*Cr.* RECEIPTS.			
1852.	£	s.	d.	1852.	£	s.	d.
1st January, To Amount of Valuation at commencement of year,	8	6	6	16th Dec., By Amount received for Grain,	10	8	2
December, ,, paid for Rent and Taxes,	7	18	7½	,, Potatoes,	6	2	6
,, ,, Labour,	6	1	11	,, Cattle sold,	8	12	6
,, ,, Manure and Seeds,	5	4	8½	,, Dairy produce,	3	4	11½
,, ,, Cattle bought,	11	13	0	By Amount of Valuation at close of year,	27	4	9
,, To Amount of Free Labour from Agricultural Pupils,	2	1	6				
,, To Profit and Loss, gain on the year,	14	5	9½				
	£55	12	0½		£55	12	0½

TABLE showing the CROPPING of the Taniokey Ordinary Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Turnips,	0 3 0	17th May and 9th June,	Not all lifted yet,	4 lbs.,	24 tons,	7 10 0	4 10 0*p.*	The land being very foul with weeds, made the preparation for these two crops very difficult.
Potatoes,	0 2 0	22nd March,	23rd November,	12 cwt.,	50 cwt.,	7 11 10	4 13 2*p.*	
					cwt. qrs. lbs.			
Oats,	2 0 0	23rd March,	4th September,	1½ cwt.,	15 2 2	3 9 6½	1 12 1*p.*	
Flax,	0 3 0	10th April,	28th July,	2 bushels,	8 st. 12 lbs.,	3 17 0	0 9 11*l.*	This crop was only in order to get into the rotation, that I sowed it with the grass and clover seeds.
Boundary Fences,	0 2 0	—	—	—	—	—	—	
Total,	4 2 0							

(Signed), WILLIAM M'CULLA, Teacher.

We certify that the above Returns are correct, according to the best of our knowledge and belief.

24th December, 1852.

ANNA E. CLOSE AND P. QUINN, Managers.

Appendix K.

II. Appendix to Dr. Kirkpatrick's Report.

Lough Ramor Model Farm.

33. Lough Ramor Ordinary Agricultural National School, County Cavan.

December 31, 1852.

Sir,—I beg to submit to you my second Report on the above School, containing an account of my proceedings in connexion with the Agricultural department for the past year.

The return of profit is small, as the expenses attending my green cropping, which are the remunerative crops, were very great. When I got possession of this farm, there were not four inches of surface soil on any part of it; and from the scratch ploughing and bad tillage it got from its former occupants, it was overgrown with weeds, and covered with stones of various sizes. For the present, therefore, because of clearing stones and weeds, digging fourteen inches deep, liming and manuring it, the crop can bring but little profit; yet the land is improved, and future crops will, I expect, amply repay the expenses. I will have it all cleaned in this way by green cropping the ensuing year. I could not bring land in such a state at once to perfection; but the improvement is very remarkable, and at my next going over the rotation I hope to have it satisfactory.

The average of my grain crops is not good, as a portion of the oats was sown on ploughed lea, which did not yield more than three barrels per acre, while some of my own tillage produced 13 barrels per acre.

Many persons, but particularly those of my neighbourhood, observed my proceedings with anxious curiosity. They considered it impracticable for me to make anything of my land, when theirs, of far superior quality, was every day deteriorating since the failure of the potato crop; and no wonder, as they continually sowed cereal crops until the land refused growing them, when they would lay it down to rest, as they call it, or rather to grow weeds, for on such land the latter are sure to predominate.

Those persons, who were heretofore opposed to a better system of tillage, are now beginning to acknowledge their error. The advantages which they see may be derived from the improved system have got the better of their prejudices, and they are now desirous of sending their children to school, and of having them taught those improved principles which they had not an opportunity of learning themselves, but which, combined with skill and industry, will make the country prosperous and happy.

I am, Sir, your obedient servant,

Patrick O'Reilly, Teacher.

Thomas Kirkpatrick, Esq., M.D.,
Inspector of Agricultural National Schools.

Balance Sheet of Farm Accounts for Year ended 31st December, 1852.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To Amount of Valuation at commencement of year,	30	17	10½	By Amount received for Grain,	8	9	9
,, Rent and Taxes,	7	1	7½	,, Potatoes and Roots,	6	8	6
,, Seeds, Lime, and Manures,	8	15	7½	,, Cattle sold,	9	1	0
,, Cattle,	8	3	6	,, Dairy Produce,	6	16	4
,, Implements and Repairs,	0	16	0	,, Eggs and Poultry,	1	19	8
,, Labour,	20	0	7	By Amount of Inventory and Valuation at close of the year,	48	2	9
,, Profit and Loss for Balance, being gain on the year,	5	3	7½				
	£80	18	10		£80	18	10

TABLE showing the CROPPING of the Lough Ramor Ordinary Agricultural National School Farm, for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Oats,	4 2 24	20th March to 10th of April,	1st to 11th Sept.,	1½ stones,	5½ barrels,	4 8 9	0 9 5½*l.*	
Bere,	0 0 32	1st December, '51,	10th September,	10 stones,	5 barrels,	2 17 1	4 12 11*p.*	
Potatoes,	1 1 26	6th Mar. to 1st May,	15th Sept. to 15th Nov.	6 barrels,	15 barrels,	7 12 10	1 10 8*l.*	
Turnips,	1 1 8	15th May to 15th June,	November,	2½ lbs.,	11½ tons,	5 8 7	0 9 11*p.*	
Flax,	0 0 16	1st May,	21st August,	2½ bushels,	30 stones,	6 15 0	3 5 0*p.*	
Vetches,	0 0 32	15th April,	20th September,	12 stones,	4½ barrels,	2 14 0	2 4 0*p.*	
Cabbages,	0 0 32	1st May,	—	—	Not weighed,	7 2 6	0 17 6*p.*	
Parsnips,	0 0 8	15th April,	15th November,	4 lbs.,	Not valued,	6 10 0	—	
Cabbages,	0 0 8	1st August,	Not pulled,	—	—	3 5 0	—	

(Signed), PATRICK O'REILLY, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief.

6th January, 1853. OWEN O'REILLY, P.P., Manager.

34. BALLEIGHAN MODEL FARM, County Donegal.

8th January, 1853.

SIR,—In submitting my second Report on the above institution, it is gratifying to me to be enabled to state, that its onward progress in the path of improvement has been steady during the past year.

The conduct, diligence, and proficiency of the "Agricultural" and "Industrial classes," have afforded me the highest satisfaction; while the zeal they evince in carrying out on their own farms at home, the improved system of tillage, they have witnessed here, convinces me that the seeds of useful instruction sown in their young minds have already produced good fruit, and that the time is not far distant when the beneficial effects of their industrial training will be everywhere observable in the improved appearance of the country. The farmers who at first looked with suspicion upon the management of the farm, as calculated to give the proprietor too favourable an impression of the capabilities of the soil, now take a deep interest in its working; and to their assistance in the various operations is to be attributed the small amount paid for labour this season.

I believe I am justified in stating that I have afforded a practical refutation to the oft-repeated, though groundless assertion, of the impossibility of successfully combining agricultural with literary instruction.

My anxiety to bring the farm within the limits of profitable cultivation as early as possible, induced me to cultivate a larger area of green crops this season than a five-course rotation would admit of, yet as the surplus can be sold at remunerative prices, no inconvenience will be felt.

The preparation of the soil for these crops, and their subsequent treatment, received the most minute attention, the effect of which was, an abundant crop, the portion allocated to the potato excepted.

In consequence of the hitherto unproductive state of the farm, house-feeding could only be partially carried out during the summer months; but in future, I entertain the hope of being able to furnish more satisfactory results from this department of the farm management.

I am, Sir, your most obedient servant,

WILLIAM A. CAMPBELL.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

BALANCE SHEET of the Farm Accounts for the Year ended 31st December, 1852.

Dr.	£	*s.*	*d.*
To Amount of Valuation, at commencement of year,	66	16	5
,, paid in Rent, Taxes, &c.,	14	3	4½
,, paid for Seeds, Lime, and Manure,	15	0	3
,, paid for Cattle,	6	10	0
,, paid for Implements and Repairs,	5	14	5
,, paid for Labour,	13	15	4
,, Gratuitous Labour of Pupils,	7	16	0
,, Profit and loss for balance, being gain on the year,	25	1	10
	£154	17	7½

Cr.	£	*s.*	*d.*
By Amount received for Grain,	31	19	7
,, Potatoes and Roots,	11	11	0
,, Cattle sold,	7	13	6
,, Dairy Produce,	18	10	9½
,, Eggs and Poultry,	0	15	11
,, Inventory and Valuation, taken at close of the year, inclusive of proportion of unexhausted Improvements,	84	6	10
	£154	17	7½

TABLE showing the CROPPING of the Balleighan Ordinary Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Oats,	3 3 26	1st week in April,	September,	12 stones,	18 cwt.,	2 5 0	1 15 0	
Flax,	1 0 0	April,	August,	3½ bushels,	5½ cwt.,	4 10 6	11 5 0	
Swedes,	1 3 16	May,	December,	6 lbs.,	28 tons,	8 2 6	5 17 6	
Aberdeens,	1 0 0	June,	November,	6 lbs.,	25 tons,	6 5 0	1 16 0	
Potatoes,	0 2 0	March and April,	October,	12 cwt.,	1 ton,	8 4 0	2 4 0*l.*	The virulence of the potato disease was felt more this season along the shores of the Swilly than any season since 1846. Neither the time of planting, nature of the soil, or kind of seed, possessed any power to stay its destructive progress.
Carrots,	0 0 10	3rd week in Mar.,	October,	6 lbs.,	10 tons,	9 10 10	0 10 0	
Parsnips,	0 0 12	3rd week in Mar.,	October,	6 lbs.,	12 tons,	10 10 0	0 10 0*l.*	
Grass (Hay),	1 0 32	Sown with Oats,	1st August,	2½ bush. and 10 lbs. clov.,	2 tons,	1 18 6	1 2 6	
Grass (Soiling),	2 1 24	—	—	—	—	—	—	

(Signed), WILLIAM A. CAMPBELL, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief.

January 8, 1853. ALEXANDER RENTOUL, Manager.

Appendix K.

II. Appendix to Dr. Kirkpatrick's Report.

Ballyougry Model Farm.

35. Ballyougry Ordinary Agricultural National School, County Londonderry.

January, 1853.

Sir,—In compliance with your directions, I beg to submit to you an account of the operations of the Agricultural department of the above School, for the year ending 31st Dec., 1852.

In my Report for 1851 I described the situation, extent, and quality of the Model Farm, and the system of cropping pursued on it. The table of cropping appended to this Report will show the kinds and proportions of the several crops grown last year; and I shall only here state such peculiarities in the details, and their results, as I think deserving of particular attention.

The land intended for green crops was dug from 12 to 15 inches deep in December, and ploughed, harrowed, and cleaned in the following spring. The potatoes were planted early in March. The Cruffles were the most prolific, and of a superior quality; but they suffered severely from the blight, as about one-half of them proved unsound. Of the Clusters and Prince Regents about three-fourths were good. The Orkney Reds suffered most, as about two-thirds of them were diseased, though the seed was grown on the sea-shore in the north of Scotland, and were said to be free from blight. I had the unsound ones well dried, and they kept a considerable time without further failure, till they were consumed by the cattle and pigs. To the Swedes and mangels I applied about 4 cwt. of Peruvian guano per acre, in addition to a good supply of farm-yard manure. I find the best effects from the use of guano to the turnip crop. It forces the young plants quickly into the rough leaf, and thus frees them from the ravages of the fly. The produce from that portion to which the guano was applied, was much heavier than that grown on farm-yard manure alone. The way I put the guano on this year was by sowing it in a deep rut made in the top of the drill after the manure had been covered. The rut was then filled from the bottom of the drill with the shovel, and the seed sown in the usual way and rolled. The mangel seed was dibbled. I made a very simple implement, resembling the head of a rake, with a short handle, capable of making 8 holes at once, at a proper distance asunder and of a uniform depth. It accelerates the sowing of all seeds that require to be dibbled in shallow holes.

After the winter vetches were cut, I had the ground prepared for Aberdeen turnips: it was ploughed three times, harrowed and rolled, and cleaned of weeds after each ploughing. It was very difficult to get it pulverized and properly cleaned of couch and other weeds. I had made a considerable collection of bones, which I had broken, put into a wooden

vessel moistened with water, and allowed to ferment. I then applied sulphuric acid, diluted with water (equal parts of water with acid). The mass was occasionally stirred, and in about eight days was reduced to a pulp, which was then mixed with fine dry peat; it was then put through a sieve, to separate its parts and reduce it to a fine powder. It was sown with the hand on the top of the manure in the drills. This crop was very productive, and much superior to that of many of my neighbours, sown a month earlier.

Our cattle are house-fed, except for a portion of the day during favourable weather, when they are driven out to a rough hill I have rented, adjoining the farm. They are regularly fed every three hours during the day, and the food varied as much as possible. The milk and butter used by my family are charged at the usual price of the neighbourhood. Being convenient to the city, we churn our milk and send in our butter, and sometimes the buttermilk, to be sold. Our butter we dispose of fresh, in prints or pats, by which it brings a higher price, and weighs better than if sold in casks or firkins. It generally brings the highest price in the market. I bought a pig on the 17th of June for 21*s.*: I was offered £3 12*s.* for it at Christmas, which I refused, considering it worth more. The amount for six months' feeding is £2 11*s.*, or 8*s.* 6*d.* per month, besides a quantity of rich manure. So there is still a considerable profit to be made by keeping this animal, to which the Irish farmer is so partial.

Manure.—This is regularly removed from the cow-houses and pig-sty, and formed into a compost with bog mould, earth, and all the vegetable matters collected on the farm. The bog and earth absorb the juices, and prevent the volatile gases from escaping.

The "Agricultural Class" consists of the advanced boys from the third and fourth classes. They receive agricultural instruction after the literary business of the school is over, on three days of the week. If the weather be unfavourable on the two days appointed for "practical agriculture," we devote the time to agricultural instruction.

I purchased a small chemical apparatus for the purpose of illustrating, by experiment, the several principles in the introductory portion of the Agricultural Class Book.

When treating of the inorganic elements of the soil, I exhibit specimens of the various substances composing it, and also the inorganic elements of the plants grown on the farm in a similar way. I also explain the organic elements by producing them, and testing their nature and properties as far as our time and apparatus will allow. When boys see the different substances that enter into the composition of the soil, and of the cultivated plants, and have their properties illustrated to them by experiment, they are likely to be understood and remembered. I am no advocate for confining the boys altogether to the mere scientific principles of agriculture,

to the neglect of the practical details of farm management. The two should be combined—the practical based on the scientific; so that the advanced boys in our Agricultural Classes should be able to give satisfactory reasons for the various operations they may be called on to perform in the management of a farm.

I think I can safely say our farm management has induced others in the neighbourhood to follow our example to improve their mode of cultivation, and in many important things in the cultivation of the soil. I annex the valuations taken at the commencement and close of the year, and the Balance Sheet of the year's accounts.

I have the honour to be, Sir, your obedient servant,

R. HARVEY.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

SUMMARY of the Year and BALANCE SHEET of Ballyougry Model Farm.

Dr.	£	*s.*	*d.*
To Amount Valuation, commencement of year,	53	7	8
,, paid Rent, Taxes, &c.,*	7	15	2
,, paid for Seeds, Lime, Manure, &c.,	13	6	11
,, paid for Cattle during the year,	1	5	0
,, paid for new Farming Implements and Repairs,	2	18	3
,, paid for Labour,	7	2	0½
,, Gratuitous Labour of Pupils,	1	6	0
,, Profit and Loss for Balance, being gain on the year,	15	12	6
	£102	13	6½

Cr.	£	*s.*	*d.*
By Amount received for Grain,	4	18	9
,, Potatoes, Roots, &c.,	7	3	0
,, Cattle Sold,	7	11	2
,, Dairy Produce,	15	2	1½
,, Eggs, Poultry, &c.,	1	7	6
By Amount of Inventory and Valuation, taken at close of the year,	66	11	0
	£102	13	6½

* There is no rent paid for the farm. This amount includes its value, and £1 17*s.* 6*d.* paid for a rough hill rented as a paddock for the cattle in favourable weather.

TABLE showing the CROPPING of the Ballyougry Ordinary Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Oats,	1 3 4	March,	September,	14 stones,	140 stones,	2 4 0	3 1 0	Angus.
Turnips, Swedes,	0 1 22	June,	December,	6 lbs.,	31¼ tons,	6 10 0	15 7 0	After a stolen crop of winter vetches.
,, Aberdeens,	0 2 1	July,	December,	6 lbs.,	24 tons,	5 13 10	6 6 2	
Mangels,	0 0 21	April,	November,	4 lbs.,	16 tons,	5 15 0	6 5 0	Long red and orange globe.
Potatoes,	0 2 25	March,	October,	9 cwts.,	23 sacks,	7 16 6	5 9 6	Cruffles, clusters, Prince Regents, and Orkney reds.
Clover and Grass,	1 1 20	April, 1851,	June and August,	12 lbs. clov., 1 bush. grass,	Value £6,	1 8 6	4 11 6	
Carrots,	0 0 5	April,	November,	5 lbs.,	12 tons,	7 0 0	11 0 0	
Winter Vetches,	0 2 0	October,	May and June,	2½ bushels, & 3 st. wheat,	10 tons, 11 cwt.	3 12 0	3 8 0	A stolen crop.

(Signed,) ROBERT HARVEY, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief.

WILLIAM M'CLURE, Manager.

January 20, 1853.

36. Kednaminsha Ordinary Agricultural National School, County of Monaghan.

January, 1853.

Kednaminsha Model Farm.

Sir,—In compliance with your directions, I beg to submit to you a brief account of the working of the Agricultural department of the above School for the year 1852.

In my Report for 1851, I stated that the farm cultivated as a Model, under my directions, and for the instruction of the pupils and farmers of this locality, was not on my own hands, but was in the possession of a tenant of the Bath estate, who carried out my instructions. This arrangement was not considered satisfactory, and accordingly, in May last, the agent of this estate assigned me a farm of fourteen statute acres, to be cultivated *on my own account,* in connexion with this school. As it has been such a short time in my possession, I consider it premature to attempt giving an account of my operations, or their results for the past season; but I hope to be able to furnish a satisfactory Report and Balance Sheet at the end of the present year.

The soil is of the clay-slate formation, very light, yet yielding a fair return, when properly managed, which heretofore was far from being the case. Yet I hope that I shall be able, in the course of a short time, to show the people in my neighbourhood what can be effected by intelligence, and well directed energy in its cultivation.

The tenant of the original farm is managing it to the best of his ability, on the plan I laid down for his guidance. There is a marked contrast between it and the surrounding farms, as respects the improved system of cultivation, and amount of green crops raised.

The number of boys receiving agricultural instruction is from sixteen to eighteen. They are lectured, and examined occasionally, on five days of the week in the science of agriculture. They sometimes take part in the practical operations of the farm; but some of their parents object to this, without some pecuniary remuneration. Should the Commissioners be pleased to grant a small weekly allowance to a few of the most deserving, as an "Industrial Class," it would act as a stimulus to the rest, in inducing them to exert themselves more actively in acquiring a thorough knowledge of agriculture, and the sciences connected with it, besides accustoming them to early habits of industry.

I have the honour to remain, Sir, your most obedient servant,

Patrick Kevany.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector, &c., &c.
Education Office.

Appendix K.

II. Appendix to Dr. Kirkpatrick's Report.

37. Fivemiletown Ordinary Agricultural National School.

1st January, 1853.

Fivemiletown Model Farm.

Sir,—Agreeably to your request, I beg to furnish you with a brief Report on the agricultural department of this school, with the Balance Sheet of the farm accounts for the year, ended 31st December, 1852.

In my last Report I stated, that for reasons which I then gave, I intended to change the system of cultivation from a four to a three course rotation. This intention I have carried into effect; and the Balance Sheet shows that the change was a judicious one. However, this being the first season, and all the land not being yet fully under, or benefitted by, the rotation so recently adopted, the result is not so profitable as it otherwise would be.

Following our usual practice, in preparing for green crops, we had the land dug immediately after autumn, to the depth of from 12 to 15 inches; still, in spring, we had some difficulty in getting it properly cleaned. In the beginning of April it was again dug nearly as deep as at first, and all weeds, grass, &c., burned. To insure a thorough cleansing, as well as to set an example to others, it will be again carefully picked, after having been dug, previous to the sowing of a grain crop. Many who witnessed what time and labour were spent in preparation for our green crop said, "less labour would suffice;" but when, during the summer and autumn, they saw the crops growing, they acknowledged their mistake. Indeed, there is, at present, more loss by negligence and error in this particular of cropping than in most others.

The mangel was a light crop; the carrots, a heavy one—at least in this locality. Mangel would be more extensively cultivated here, were the produce, (weight for weight, or nearly so,) proportionate to that of Swede turnips or Altringham carrots. Salt, in addition to the manure applied to the mangel, has been suggested as likely to raise a heavier crop. The plan shall be tried; and if found successful, it will be more generally adopted here.

In the inventory, the green crops on hand are valued at the present market rates. But whether used for cattle feeding (and the cattle disposed of after their consumption), or sold in spring, the item of profit would be larger in the present Balance Sheet. The oats, with which clover and grass seeds had been sown, were so heavy a crop, that I much fear there will be no grass fit for soiling on about half of this division. On this part it is proposed to try flax:—First, because that crop has not been hitherto tried; and second, because it is considered, that on that part of the rotation it will be the most profitable substitute for the grass.

The system of house-feeding the cattle, as described in my former Report, is still adhered to without any change.

Fivemiletown Model Farm.

The two scholarships founded in this school will eventually do much good. You will observe that I estimate the labour done by each at £2 10*s.* per annum.

Of those who witness our operations, some readily adopt the same plans, as far as their circumstances will permit; while others wait to see the result of *farther trials.* Yet, upon the whole, I am happy to say, both inquiry and improvement are going forward; while the increased attendance at, and interest taken in, the school show that its value is becoming better appreciated.

I remain, Sir, your most obedient servant,

HUGH LYNCH.

To Thomas Kirkpatrick, Esq.,
&c., &c., &c.

Cr. SUMMARY of the Year, and BALANCE SHEET. *Dr.*

	£	s.	d.		£	s.	d.
To Amount of Valuation at commencement of Year, .	17	1	6	By amount received for Grain, ...	5	14	5½
,, paid in Rent, Taxes, &c., ...	5	13	7	,, ,, for Potatoes, &c., ...	5	11	7½
,, ,, for Seeds, Lime, Manure, &c., . .	4	2	7	,, ,, for Cattle sold, ...	10	17	3
,, ,, for Cattle during the year, . .	3	11	0	,, ,, for Dairy Produce, . . .	11	19	6
,, ,, for new Farming Implements and Repairs, ...	0	6	2	,, ,, for Eggs, Poultry, &c., . .	2	6	5
,, ,, for Labour, ...	3	14	6½	Amount of Inventory and Valuation taken at close of the year, inclusive of proportion of unexhausted improvements, ...	17	7	0
,, ,, Gratuitous Labour of the Pupils,* .	5	0	0				
Profit and Loss for Balance, being gain on the year, .	14	6	10½				
	£53	16	3		£53	16	3

* Labour of Boarders.

TABLE showing the CROPPING of the Fivemiletown Ordinary Agricultural National School Farm, for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Oats,	1 1 6	2nd week in March,	End of August,	10 stones,	212 stones,	3 0 0	1 6 0	This crop was so heavy that it lodged, and, therefore, to some extent in one place, and altogether in another place, destroyed the clover and grass seeds.
Grass, for cutting,	1 1 6	3rd week in April,	Part used for soiling, and part made into hay,	12½ lbs. red clover, and ⅝ bushel grass,	—	1 17 6	—	
Turnips,	0 2 30	Middle of May and July,	November and December,	4 lbs.,	23 tons,	4 16 0	6 0 0	Those sown in July, after winter vetches, did not produce more than 12 tons per acre. The ground for all the green crops this season required greater labour than usual, before it was brought into proper tilth for the reception of the seeds.
Carrots,	0 0 30	Last week in April,	November,	7 lbs.,	16 tons,	6 0 0	12 0 0	
Mangel wurzel,	0 0 10	Last week in April,	November,	8 lbs.,	16 tons,	6 0 0	5 10 0	
Potatoes,	0 1 0	2nd week in March,	July and August,	16 cwts.,	8 tons,	6 10 0	7 10 0	
Cabbage,	0 0 10	2nd week in March,	Autumn,	Each plant 2½ ft. by 20 in.	Not known,	5 5 0	5 10 0	
Beans,	0 0 6	2nd week in March,	Autumn,	15 stones,	Not known,	4 0 0	4 0 0	
Waste,	0 0 35							
Total,	4 0 13							

(Signed), HUGH LYNCH, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

6th January, 1853. WILLIAM PATTERSON, Manager.

Appendix K.

II. Appendix to Dr. Kirkpatrick's Report.

Dressog Model Farm.

38. Report on the Dressog Ordinary Agricultural National School, County of Tyrone.

January, 1853.

Sir,—I beg leave to forward you a brief Report of my proceedings on the farm attached to the above school, during the past year, 1852.

Accompanying this Report are the "Statistical Returns," and "Farm Account Book," from which you can see, that though I have, as yet, attained to no very striking results, in point of profit, still there is an advance over 1851. The balance sheet would have been still more favourable, but for the death of a heifer, worth £4, in the month of July. Her disease was bloody murrain, which carried her off very rapidly. Dry summers are generally supposed to be attended with murrain, in places badly supplied with water; but, even at the time I write, I have a lately-calved cow, just recovering from a severe attack of dry and bloody murrain. I am sorry to say, the complaint is pretty general and fatal, this winter, in this neighbourhood, especially among newly-calved cows. Appended to this Report are the general symptoms my cow exhibited, together with the mode of treatment successfully adopted. If you consider its publication might be conducive of any good, you may make whatever use you please of the document.

As the Return No. 2 shows the cropping during the past year, and as no originality characterized my mode of culture, I deem it unnecessary to trouble you with any detailed account on this head.

No "Industrial Class" has yet been formed in this school; yet, I am convinced, the want of such a class greatly counteracts our usefulness. I am, however, happy to state, that I notice a very marked improvement in the management of the green crops in this locality, particularly on the farms of the parents of those boys who have been most attentive to my instructions.

In conclusion, I must again beg leave to bear testimony to the fact, that the pupils are rather stimulated than retarded in their literary studies, by a judicious course of instruction in the principles of agriculture.

I remain, Sir, your very obedient servant,

W. Healy.

T. Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

SYMPTOMS OF MURRAIN, WITH ITS TREATMENT.

Symptoms.—Hanging of the ears; dullness of the eyes; pulse low in first stage, but high as the disease advanced; and a constant pressing, but without any discharge of excrement or urine.

Treatment.—Finding the beast costive, I gave her 1 lb. of salts, 1 lb. of dark brown sugar, and about the size of a bean of saltpetre, dissolved together, after which I moved her about occasionally. In a short time she passed, with much apparent difficulty, a small quantity of dark red water.

As I found the first dose slow in operating, I gave her 1 quart of stale beer, ½ lb. of dark sugar, and 1 oz. of pepper—the whole mingled together. In about eleven hours after I gave her the first medicine, she was severely purged; in thirty, the water became somewhat clearer; and in about forty-eight, it was a natural colour.

Food.—Bran water, a decoction of comfrey, fresh butter, and such laxative things, were constantly given, from the first day till I found her come to her usual state. From my experience of the disease, I consider it is only necessary to get the animal purged as quickly as possible, and give abundance of laxative drinks, for some days, to perform a cure. In fact, the speedy purging is the main secret of success in treating this complaint.

W. H.

To Dr. Kirkpatrick.

BALANCE SHEET of Farm Accounts for Year ended 31st December, 1852.

Dr.

	£	s.	d.
To Amount of Valuation at commencement of year,	41	2	6
,, paid Rent and Taxes,	10	0	0
,, ,, Seed, Lime, and Manure,	8	1	6
,, ,, Cattle,	10	18	0
,, ,, Implements and Repairs,	0	3	0
,, ,, Labour,	14	16	4
Profit and Loss for balance, being gain on the year,	5	13	0
	£90	14	4

Cr.

	£	s.	d.
By Amount received for Grain,	16	0	0
,, ,, for Potatoes and Roots,	2	9	0
,, ,, for Cattle,	12	2	6
,, ,, for Dairy produce,	12	10	0
,, ,, for Eggs and Poultry,	2	0	0
Amount of Inventory and Valuation at close of the year,	45	12	10
	£90	14	4

TABLE showing the CROPPING of the Dressog Ordinary Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.				tns. cwt. qrs.	£ s. d.	£ s. d.	
Turnips, Swede, . .	0 2 0	25th May, . .	—	4 lbs., . .	22 10 0	9 0 0	3 10 0	
Potatoes, Pinks and Mullins, . .	0 2 0	First and last weeks of March,	Dug for use from August, .	17 cwts., .	3 0 0	7 10 0	2 10 0	About one half sound.
Cabbages, Flat Dutch, and Curly Kale, .	0 0 20	Various times, .	—	—	15 0 0	8 0 0	3 10 0	Flat Dutch nearly destroyed by caterpillars, and another variety of insect which blackened their leaves in the early period of their growth.
Spring Vetches, . .	0 0 15	End of February,	Cut for soiling, .	13 stones, .	9 0 0	—	—	Not estimated.
Beans, . . .	0 0 3	1st week in March,	August, . .	12½ stones, .	0 17 0	7 5 0	—	At headlands; value not estimated.
Carrots, . . .	0 0 2	1st week in April,	November, . .	6 lbs., . .	10 0 0	8 0 0	2 0 0	
Clover and perennial grass, . .	0 3 0	March, . .	Soiling, . .	8lbs. clover, 1½ bsh. grass-seed	1 0 0	2 5 0	1 10 0	This was a very bad crop, owing to impure seeds.
Oats, ...	3 0 0	2nd week in March,	End of Aug., and 1st week of Sept.,	16 stones, .	114 stones,	2 15 0	1 5 0	

(Signed,) WILLIAM HEALY, Teacher.

I certify that e above returns are correct, according to the best of my knowledge and belief,

4th January, 1853. JAMES ANDERSON, Manager.

Appendix K.

II. Appendix to Dr. Kirkpatrick'sReport.

Drumnafern Model Farm.

39. Drumnafern Ordinary Agricultural National School, County Tyrone.

January, 1853.

Sir,—In conformity with your instructions, I beg to submit to you, my Second Annual Report on the above School and Model Farm, for the year 1852.

The Farm consists of 5a. 1r. 16p. statute measure, on which a five-course shift has been pursued as follows:—first year, green crops; second year, oats or flax, with seeds; third year, clover and grass for hay and soiling; fourth year, pasture; fifth year, oats. For this rotation I am about substituting the following, as soon as a sufficient quantity of manure shall have been accumulated to produce the stolen crops required, as a substitute for the pasture contained in the present system. I do not consider it best to purchase manure for the purpose, as I wish to work the farm upon its own resources. The rotation I intend to follow in future is,—first year, green crops; second year, wheat, oats, or barley, with seeds; third year, grass for hay and soiling; fourth year, oats; fifth year, flax, succeeded by a stolen crop of vetches, or transplanted rape.

The plan I pursue in the management of the different operations on the farm, is that recommended by Murphy, in his "Agricultural Instructor," in some cases slightly modified according to circumstances.

The progress of the Agricultural Pupils, in scientific and practical knowledge, is quite satisfactory, as was evinced by their answering at the time of your inspection in December last. The prospect of being ultimately admitted to the Glasnevin Establishment to complete their course of Agricultural Training, is a great stimulus to exertion amongst them.

A considerable number of the farmers in this locality, following my example, have betaken themselves to thorough-draining, turnip culture, and the sowing of clover and grass-seeds. These first steps towards improved husbandry will, I expect, be followed by others, and ultimately be the means of placing the farmer in a better position in society.

In conclusion, I beg to tender you my best thanks for the supply of agricultural books, which I received since your visit.

I am, Sir, your very obedient servant,

Matthew Forbes.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

Remarks of Lord Charlemont's Agriculturist upon his visit to the Model Farm.

"Having visited Mr. Forbes's farm, I feel much pleasure *in contrasting its present healthy state with what it was when I first saw it, three years ago.*"

D. Mitchell, Agriculturist.

BALANCE SHEET for the Year 1852.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To Amount of Valuation at commencement of year,	35	14	0	By Amount received for Grain,	0	2	11
,, Rent and Rates,	3	14	1	,, for Cattle sold,	1	7	0
,, Seeds, Manure, &c.,	1	16	8	,, for Dairy Produce,	7	1	10
,, Cattle,	1	2	11	,, for Eggs and Poultry,	1	2	1
,, Farming Implements,	0	4	1	,, Inventory at close of year,	42	3	4
,, Labour,	9	0	0				
,, Profit and Loss, gain,	0	5	5				
	£51	17	2		£51	17	2

TABLE showing the CROPPING of the Drumnafern Ordinary Agricultural National School Farm, for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Turnips,	0 2 0	May 13 & June 12,	1st December,	4 lbs.,	21 tons,	3 5 0	10 15 0	
Potatoes,	0 1 17	April 10,	—	80 stones,	—	4 15 0	—	Being made use of early in the season, the produce was not estimated.
Cabbages,	0 0 10	March 15,	—	—	—	—	—	
Artichokes,	0 0 6	April 1,	November 20,	130 stones,	600 stones,	6 0 0	9 10 0	
Carrots,	0 0 5	March 20,	November 6,	4 lbs.,	611½ stones,	3 15 0	12 10 0	
Onions,	0 0 5	March 21,	July 24,	—	—	—	—	Not ascertained.
Oats,	2 0 2	March 16,	September 9,	12 stones,	105 stones,	1 10 6	3 17 6	
Vetches,	0 1 18	April 3,	—	2½ bushels,	—	—	—	Not estimated.
Clover and Grass,	1 3 23	April 20, 1851,	—	14 lbs.,	—	—	—	Not estimated.
otal,	5 1 16							1A. 0R. 6P. pasture.

(Signed), MATTHEW FORBES, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

31st December, 1852. JOSEPH ACHESON, Manager.

40. Parteen Ordinary Agricultural National School, County Clare.

7th January, 1853.

Sir,—In forwarding the "Statistical Returns" and "Farm Account Book," for the year ended the 31st ultimo, I beg to submit the following Report of my proceedings for that period.

In my last Report, I mentioned that I had prepared the lea division for a green crop instead of grain, and I have no reason to regret making the change, as a grain crop would not pay nearly as well as a green crop. I intend having a stolen crop regularly after the green crop. I have now part of the lea division dug for mangels next season, and I am about getting the remainder dug for potatoes; the latter being the best paying crop, though partially blighted. I had applied bog-mould as a top-dressing to the grass of the previous year, and I remarked that wherever the tubers came in contact with it they were perfectly free from disease. Under my present system of cropping I have two green, one grain, and one grass division. I grew no flax this year as I found it to be one of the worst paying crops, except when prepared by the family.

Housefeeding.—I fed two cows on grass and vetches from 12th April (when I began to cut rye-grass) to the middle of August. At that time one of the cows took that dreadful disease the pleura pneumonia and I had to sell her for a small sum. In December last the second cow took the same distemper, and I had to part with her also. I have now only one yearling and she has the distemper at present, so that I took no credit for her in the inventory, as I cannot say how long she will be of any value to me.

Grass.—In consequence of the constant supply of liquid manure plentifully applied to this crop, I obtained four superior cuttings off the whole, and a fifth from a part of the plot. The liquid was barrowed out in a tub, and applied with a tin can.

Agricultural Class.—The pupils of this class perform the entire of the light work, such as sowing all the seeds, weeding, hoeing, thinning, and even digging between the drills. They are progressing satisfactorily in agricultural information.

Industrial Class.—This class continues to afford much satisfaction by the efficiency with which they perform the work allotted to them, and their general attention and proficiency in the school.

Stolen crops.—In October, after digging between the mangels, turnips, and parsnips, the boys transplanted rape between the drills, by which means I have half the farm under a stolen crop.

Profit.—I had hopes of being able to show a satisfactory Balance Sheet this year, but the unforeseen and unfortunate loss sustained from the disease in my cows, which compelled me to part with two of them worth £18 for £4 completely upset my anticipations in this respect.

I have the honour to be, Sir, your obedient servant,

John O'Dea.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

SUMMARY of the Year and BALANCE SHEET of the Parteen Model Farm for 1852.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To Amount of Valuation at commencement of the year,	48	13	1	By Amount received for Grain,	1	5	6
,, ,, paid for Rent,	8	0	0	,, ,, ,, for Potatoes, Roots,	6	15	11
,, ,, ,, Seeds, &c.,	17	14	5	,, ,, ,, for Cattle sold,	23	17	6
,, ,, ,, Cattle,	4	14	9	,, ,, ,, for Dairy Produce,	20	19	1
,, ,, ,, New Implements,	0	4	5	,, ,, ,, for Eggs, Poultry, &c.,	1	2	7
,, ,, ,, Labour,	2	4	0½	,, ,, of Inventory, &c., taken at close of year,	25	4	9
,, ,, of Gratuitous Labour of Pupils,	4	0	0	By Profit and Loss for balance, being loss,	6	5	4½
	£85	10	8½		£85	10	8½

TABLE showing the CROPPING of the Parteen Ordinary Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.				tns. cwts. qrs	£ s. d.	£ s. d.	
Potatoes,	0 1 24	January, 1852,	October, 1852,	120 stones,	5 10 0	12 11 6	6 1 10*p.*	Nine per cent. were diseased in lazy beds, in lea, but 50 per cent. in drills; the return is for the lea.
Turnips, Aberdeen,	0 0 24	24th June, 1852,	October, 1852,	4 lbs.,	15 0 0	8 4 3	0 15 3*p.*	These were after stolen crops.
,, Globe,	0 0 16	27th July, 1852,			18 0 0		0 15 9*p.*	
Parsnips,	0 0 20	February, 1852,	January, 1853,	4 lbs.,	4 15 0	13 2 6	0 10 10*p.*	These partially failed.
Mangels,	0 0 16	3rd May,	29th November,	4 lbs.,	20 0 0	8 18 4	4 8 4*p.*	I have charged three-fourths of the manure to the green crops, and one-eighth to each of the two following crops.
Cabbages,	0 1 8	Different seasons,	Different seasons,	2 ft. by 2 ft.,	Not taken,	8 15 6	0 17 6*p.*	
Vetches,	0 1 0	Sep. '51, & Mar. '52.	Different seasons,	12½ stones,	13 15 0	4 18 6	0 11 6*p.*	These were stolen crops.
Rape,	0 1 20	Planted after green crops in '51.	March,	2 ft. by 2 ft.,	Not taken,	4 17 4	0 12 8*p.*	I was ill while these were being used.
Barley,	0 1 10	3rd May,	23rd August,	10 stones,	125 stones,	6 10 2	0 15 2*p.*	
Clover,	0 1 24	5th April, 1851,	Cut for house-feeding,	12½ lbs.,	32 0 0	6 9 0	4 15 0*p.*	I had four cuttings off this, and a fifth off a part of it.

N.B.—The above is calculated according to the rate of wages paid here, and also according to the mode of culture practised on the Parteen farm. The rent is estimated at £3 11*s.* per statute acre, but none is paid, the farm being granted rent free by the patroness, Mrs. Honan.

(Signed), JOHN O'DEA, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

8th January, 1853. THOMAS KANE, Manager.

APPENDIX K. II. Appendix to Dr. Kirkpatrick's Report.

Feakle Model Farm.

41. REPORT on the FEAKLE ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Clare.

SIR,—I beg to submit my first Report on the Agricultural Department of the above School, together with the Returns and Balance Sheet of the Farm Accounts for the year ended 31st December, 1852.

Previous to January 1852, and since my farm was taken into connexion with the Agricultural Department of the Board of National Education, I drained that portion of it that could not otherwise be properly laboured. I also raised and removed a large quantity of stones, and had all the interior fences removed, thereby gaining more land, and preventing the delay occasioned by the frequent turnings of the plough.

Considering the "four-course rotation" best adapted to the nature of the soil, &c., I had the farm divided into four equal divisions of 1½ acres each, on which I am following the regular four-course shift.

When I first set about carrying out a regular rotation of cropping, my neighbours condemned the system entirely saying it would never pay; but knowing that to people in this backward locality, anything in the way of improvements in agriculture was a mystery, I have endeavoured to point out to them, and I trust with success, that the course I adopted, though even on a small scale, was a sure road to follow in order to realize permanently profitable results.

The general culture of the crops was attended to with the greatest care and assiduity, and superintended for the most part by myself, without at all interfering with my duties as Teacher; proving that the literary suffers nothing in being in connexion with the agricultural department.

Wheat.—This crop was sown on a field occupied the previous year by potatoes, carrots, and parsnips; the soil was ploughed after lifting the potatoes, and before sowing the seed it was harrowed down, and then ribbed—the seed was then sown broadcast, and covered by two strokes of the harrow, giving the crop when growing the appearance of being sown in drills.

Oats.—The land for this crop was merely ploughed, and the seed harrowed in. The clover and grass seeds sown with this crop promise well.

Green crops.—For these crops the land was dug over early in autumn, and subsequently received two ploughings and harrowings preparatory to sowing the seed. The manure applied to these crops was at the rate of 22 tons of farm-yard manure to the statute acre; this manure raised a fair average crop, as will appear. The late varieties of turnips did not succeed well, as I could not apply a sufficient quantity of manure. This circumstance causes the weight, as well as the value of this crop, to appear rather low in the Statistical Return. I beg to remark, that I could not keep the cattle in the house the whole year, by reason of not having the land in such a way as to

grow sufficient crops for feeding purposes; but by the help of a small paddock, I was enabled to keep two cows and two heifers through the year.

I hope I will be able to keep additional stock this year, as I have 1A. 2R., or one-fourth the farm laid down with grass seeds and clover.

Agricultural instruction.—This, for the most part, is confined to the school-room, there being as yet no paid "Industrial Class," and the parents of the children having a prejudice against their children working on the farm. This difficulty is now almost removed, partly by the success that has attended my labours, and partly by the assistance I have received from the Patron, the Rev. Mr. DORE, P.P., who never loses an opportunity of impressing on his people the obligations they are under of properly educating their children.

As to the degree of proficiency of the Agricultural Class, I can only say, that at the examination held lately by Mr. Brogan, Sub-Inspector of Agricultural Schools, they acquitted themselves satisfactorily.

I am, Sir, your very obedient servant,

MICHAEL MORISSY.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Feakle Model Farm.

SUMMARY of the Year and BALANCE SHEET.

Dr. EXPENDITURE.

	£	s.	d.
To Amount of Valuation of 1st January, 1852, . .	30	14	3
,, ,, paid for Rent, Taxes, &c., ...	7	14	0
,, ,, Do., do., auxiliary paddock,	1	5	0
,, ,, paid for Seeds, &c., ...	5	7	3
,, ,, paid for Labour, including Gratuitous Labour of Pupils, ...	15	4	6
Profit and Loss for balance, being gain on the year, .	10	2	0
	£70	7	0

Cr. RECEIPTS.

	£	s.	d.
By Amount received for Grain, ...	8	7	0
,, ,, Cattle sold, ...	9	5	0
,, ,, Dairy Produce, ...	4	0	0
Valuation, 31st December, 1852, ...	48	15	0
	£70	7	0

The root-crop does not appear in the Balance Sheet, as it was consumed on the farm, and by my family; as also eggs, poultry, &c.

TABLE showing the CROPPING of the Feakle Ordinary Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Wheat,	1 2 0	8th January,	Week ending 28th August,	12 stones,	120 stones,	2 16 8	4 3 4	
Oats,	1 2 0	4th March,	4th September,	14 stones,	112 stones,	2 14 1	1 19 3	
Potatoes,	0 2 0	20th March,	23rd October,	100 stones,	6 tons,	9 9 6	3 17 2	
Turnips,	2 0 0	29th May,	13th November,	2 lbs.,	18 tons,	3 11 5	4 10 7	2 roods white globe turnips, and 2 roods of Aberdeen turnips, sown 2nd July, succeeding a stolen crop of winter vetches and rape.
Carrots,	0 0 20	6th May,	6th November,	3 lbs.,	16 tons,	6 0 0	3 12 0	
Parsnips,	0 0 20	26th March,	13th November,	2½ lbs.,	18 tons,	6 10 0	4 15 0	
Mangels,	0 0 20	14th May,	5th November,	6 lbs.,	24 tons,	6 12 6	8 7 6	
Cabbages,	0 0 20	18th March,	—	16 ounces,	22 tons,	3 15 0	10 0 0	
Vetches,	0 1 0	October, 1851,	June and July, 1852,	12 stones,	10 tons,	2 16 0	2 0 0	
Rape,	0 1 0	August, 1851,	April, 1852,	—	—	—	—	

(Signed), MICHAEL MORISSY, TEACHER.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

4th January, 1853. JAMES DORE, Manager.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

42. CAHERSHERKIN ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Clare.

December 31, 1852.

Cahersherkin Model Farm.

SIR,—Pursuant to your instructions, I beg to forward you a Report of my proceedings in connexion with the Agricultural department of this School, from the date of its being recognised by the Commissioners, in December, 1850, to the present date.

Model Farm.—The quantity of land available for cultivation is 9 acres, besides half an acre which will serve as exercise ground for the house-fed cattle. The arable part consists of three fields of 7A. 1R. 20P., 3R. 20P., and 3R. respectively.

The soil differs much in quality, being reclaimed bog in one place, retentive clay in another, gravelly soil in a third, &c., varying in depth from 20 inches to 3½ feet, and all resting on a clay-slate formation.

First field.—The first field (7A. 1R. 20P.) consisted of no less than 10 small patches, enclosed by 132 perches of useless crooked fences, with a ditch on each side five feet wide: these I levelled, having first sunk the ditches, and made stone ducts in them, and thereby gained 3R., 27P. of land, which had been worse than lost to the previous occupiers, forming receptacles for stagnant water, weeds of every description, and numerous vermin noxious to our crops.

My next object was to make as many drains here and there as took off the surface stagnant water, without doing which (as circumstances did not permit me to thorough-drain the whole at once) I could not till any except the elevated parts. For this purpose, 185 perches of drains were made, varying in depth according to the distance of the underlying rock from the surface, a stream which divides the field into 2 declivities of equal areas, serving as an outlet. Some of the little patches above alluded to had been scourged by successive corn cropping, others had been left for years to the free agency of nature to restore their fertility, and the rest having been covered over by rocks, furze, briers, &c., had never been tilled. It is unnecessary for me to mention, that owing to excessive moisture, the hollow parts had grown a luxuriant crop of rushes and other semi-equatics, to banish which, their chief source of nourishment—*water*—must be removed, and lime then applied to convert their roots, and other inert vegetable matter into immediate food for our cultivated crops. Both these remedies I have partially administered with good effect.

Rotations.—I have divided this large field into five equal parts, to suit the "five-course rotation," and purpose thorough draining the division for green crops each year. In order to get into the rotation as quickly as possible, I sowed Nos. 2 and 3 with corn (oats) and grass seeds this

year, but the corn lodging (owing I believe to the quantities of lime and sea-sand applied) totally scalded the grass, and now the only alternative left me, is to sow spring vetches in No. 2, to be followed by late turnips, as a substitute for "grass second year" in 1853, and to sow clover and grass seeds, next spring in No. 3, having first scarified it: it might give one cutting next harvest, and be "grass second year" in 1854, conformable to the rotation. The turnip and mangel crops, in No. 4, have also been partial failures.

Second field.—This field (3R. 20P.) has been separated from the last-mentioned one by a line of road, and will be worked on the "four-course shift." It has been thorough-drained and limed, and produces good crops. The division of it for green crops next year has been subsoiled with the spade 16 inches deep; and following this order, all will be subsoiled in three years more. The boys of the school, as well as the small farmers of the locality, will thus have an opportunity of witnessing the simultaneous working of the four and five-course shifts, and of testing their comparative merits.

Third field.—This field has been laid out as a vegetable garden, and is managed on a "four-course shift," potatoes, cabbages, parsnips, and carrots, following in succession, and the most useful culinary herbs being sown on the side borders. Every vacant spot in the garden has been dug deeply, exposing as much surface as possible, to the beneficial influence of the atmosphere.

Stock.—The stock on the farm this year consisted of two cows, one calf, a pony, and two pigs, up to 22nd November last, at which time an in-calf heifer was bought, and the calf sent to grass. In the summer half year, the cows were allowed out, morning and evening, on a small piece of mountain, and fed in the house on cabbage-leaves, grass, &c., at night; and during the heat of the day, in the winter half-year, they are allowed out from 10, A.M. until 2 o'clock, P.M., and are fed the remaining time in the house on white cabbage, mangel-leaves, &c., with straw or hay in alternate feeds. From the 1st of May next, however, I expect to have sufficient food to house-feed them on a proper scale. The pony is also partly house-fed, and will be a necessary appendage to the farm, for a year or two, drawing home sea-manure, and limestone. The pigs are fed on turnips, mangels, carrots, &c., mixed with refuse potatoes, bran or bean meal, on which they thrive remarkably well.

Manure.—The manure heap is made up every Saturday, and covered with the peat mould, which has absorbed the liquid from the cows during the week.

Stolen crops.—I have a plot in each of the small divisions, amounting in all to 1R. 25P., with winter vetches and rye, to be succeeded by turnips and cabbages next summer.

Offices.—The present farm offices consist of a cow-house with four stalls, dairy, stable, piggery, and fowl-house; in

the course of next season, I hope to add a barn and cart-house.

Agricultural instruction.—The "Agricultural Class" comprises the boys of the Third, Fourth, and Fifth classes, and therefore varies in number according to the attendance, being generally between twenty and thirty, who are lectured in the school for half an hour daily, on the first five days of the week. Some of the most advanced boys commenced lately to work on the farm from 12 to 1 o'clock (the time generally devoted to recreation), and the Commissioners have admitted to training at the "Glasnevin Model Farm," two of the most deserving among them, who, I trust, will fully appreciate and profit by the great advantages that institution affords. A circumstance worthy of notice is, that though these boys never had any objection to work on the farm, often volunteering their services before and after school-hours, they were always foremost in the *literary* as well as *Agricultural* classes; a fact which demonstrates that "*Agricultural*, instead of retarding the *literary* studies, rather affords a stimulus to them.

Industrial paid Class.—A paid "Industrial Class" of eight boys is to be organized, from the 1st of January next, two to be paid by the proprietor, Sir Lucius O'Brien, Bart. (who has given the land for the Model Farm, rent-free, together with £10 a year, and has given the most liberal encouragement to forward the success of this school), four by the Commissioners, and two by myself.

In conclusion, I beg to acknowledge the kind assistance and co-operation I have invariably received from the Manager, Robert O'Brien, Esq., who has been unceasing in his efforts to improve the condition of the people of this locality—people hitherto prejudiced against every innovation on their ancient system, but who are now beginning to evince some taste for "improved farming," many of them being levelling useless interior fences, making drains, and sowing more or less of every variety of green crop; and as the pupils receiving agricultural instruction are most attentive to my lectures, and seem to regret that their parents do not fully follow my advice, I hope their frequent arguments will have some good effect; but there can be no doubt that when these children themselves become the occupiers of the land, we may calculate on a thorough reformation in the agriculture of this district.

I remain, Sir, your obedient servant,

PATRICK SHERIDAN, Teacher.

Thomas Kirkpatrick, Esq., M.D.
Agricultural Inspector.

Summary of the Year, and Balance Sheet.

Dr.	£	s.	d.
To Amount of Valuation 31st December, 1851,	52	9	6
,, Estimated amount of Rent, Taxes, &c.,	4	2	0
,, paid for Seeds, Lime, &c.,	12	3	9½
,, paid for Cattle during year,	9	18	0
,, paid for new Farming Implements and Repairs,	7	16	5
,, paid for Labour,	20	9	4
,, Gratuitous Labour of the Pupils,	1	10	0
Profit and Loss, being gain on the year,	11	18	3½
	£120	7	4

Cr.	£	s.	d.
By Amount received for Grain,	4	5	0
,, for Potatoes, Roots, &c.,	9	0	0
,, for Cattle sold (3 pigs, &c.),	5	9	0
,, for Dairy Produce,	9	12	11½
,, for Eggs, Poultry, &c.,	2	4	3½
,, Inventory and Valuation taken Dec. 31, 1852, inclusive of proportion of permanent and unexhausted improvements,	89	16	1
	£120	7	4

N.B.—The gain here exhibited is less than that estimated from *Cultivation*, the chief cause being that one of the dairy Cows produced a very bad return during the season. In estimating the gain from *Cultivation* I have made allowance for the quantity of manure drawn by the Pony, and applied to the land last season, whereas in the "Farm Account Book" I have balanced it against its support.

TABLE showing the CROPPING of the Cahershirken Ordinary Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
Green Crops:	A. R. P.					£ s. d.	£ s. d.	
Potatoes in 1st field,	0 2 38	April,	October,	100 stones,	4½ tns. sound,			
Potatoes in 2nd field,	0 0 35	March,	September, for use,	100 stones,	4½ tns. sound,	8 15 0	3 5 0*p.*	About one-half diseased.
Potatoes in 3rd field,	0 0 30	February,	July and August,	100 stones,	4½ tns. sound,			
Turnips in 1st field,	0 1 38	June,	November,	4 lbs.,	9 tons,	4 19 0	1 1 0*p.*	Cause of failure I believe to be my sowing them in drills instead of beds, in wet soil.
Mangels in 1st field,	0 1 0	May,	November,	6 lbs.,	4 tons,	5 2 6	2 9 2*l.*	
Carrots in 2nd field,	0 0 35	May,	November,	6 lbs.,	40 tons, including tops,	4 19 0	25 1 0*p.*	This was the best crop I ever had.
Parsnips in 3rd field,	0 0 30	2nd week in March,	By degrees, for use,	6 lbs.,	About 2 tns., unsound,	5 2 6	4 2 6*l.*	Attacked by canker, and rotted.
Cabbages in 2nd field,	0 1 30	Planted in succession during the season,	Cut for the cattle during the season,	—	About 40 tons,	5 2 6	4 17 6*p.*	Different varieties were sown, as Drum-head, Flat Dutch, Savoys, &c.
Cabbages in 3rd field,	0 1 20							
Flax in 1st field,	0 0 10	May,	End of August,	2 bushels,	24st. heckled,	6 5 0	1 5 0*p.*	Ground had to be dug three times.
Oats in 1st field,	2 3 22	End of Mar., and beginning of April,	September,	—	—	4 10 0	0 10 8*p.*	
Grass,	2 3 32	—	Pastured,	—	—	0 8 7	—	

(Signed), PATRICK SHERIDAN, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief.

Though the farming of this plot of ground is still far from what I could wish, great allowances are to be made for the master, who is wholly dependent on his own ingenuity, being removed from all opportunities of advice, and the ground being 400 feet above the level of the sea, within four miles of the coast of the Atlantic.

4th January, 1853.

ROBERT O'BRIEN, Manager.

43. Kildinan Ordinary Agricultural National School, County Cork.

January, 1853.

Kildinan Model Farm.

Sir,—In compliance with your request, I send you the following statement of my proceedings on the farm in connexion with the Kildinan Agricultural School. The quantity of land originally attached to the school was 5½ acres statute measure, in 1848, being then a barren waste, producing nothing but heath and furze. Since 1851 two acres have been added to the farm, merely to straighten the boundary, for it grows nothing as yet but stunted heath. I did not expect, when I got possession of this wretched farm, that it would come under the notice of the Board, nor should I have applied for aid towards the agricultural department but for the District Inspector, who advised me to do so. I had it two years in my possession before I applied, during which time I expended a great deal in the reclamation and improvement of it; and though the profit has hitherto been but trifling, yet I expect at no distant day to be fully repaid for my labour. As the great object of the farmer is to raise the largest crops at the smallest cost, without deteriorating the land, he should know the nature of the crops he raises, and their adaptation to the peculiarities of soil, climate, and situation. This principle has guided me in the selection of the crops I have raised this year, viz., 1 acre 3 roods of potatoes, nearly all sound, but the produce very low. I know it is imprudent to plant so large a proportion of potatoes, but the ground, being lately reclaimed from a state of nature, was not capable of producing turnips or corn; however, I can unhesitatingly assert that I had the best crop in the neighbourhood. I raised all stones met with in second trenching the potatoes.

Turnips (2 roods 20 perches).—This crop, though insignificant when compared with the produce realized in other localities, is, nevertheless, highly satisfactory to me, being raised from a hitherto barren mountain. The turnip seed was sown by the Agricultural Class, in beds 5 feet wide, three rows in each bed; and the spaces between the drills being thus about 20 inches, admitted the "after-culture" to be performed. This mode of culture has been introduced by me into this neighbourhood, and has proved highly satisfactory to those who have practised it. It keeps the roots dry during winter, particularly in this cold mountain soil. I have tried this mode of culture, and the drill system upon even a well drained portion of land, and found the bed system much superior. It will also serve the succeeding crop.

Live Stock.—I expect to be able to keep two cows for the future. This will almost amount to a miracle to my neighbours, who told me when I got possession of this mountain farm, that I would never be able to support any animal but

a goat upon it. I am determined to carry out a four-course rotation in the garden as well as on the farm for the future.

Manure.—I have carefully attended to this important element of good farming, impressing on the minds of the children the necessity of collecting every material that would augment or improve it, particularly the scouring of dikes and ditches, road scraping, together with the cleaning of the ground, mixing the compost in alternate layers with the farm-yard dung. This to be done as early as possible in the year, in order to give time to the compost to decompose. I know farmers who fill their yard with earth from headlands and other sources in the month of May, and turn it out in the month of July following, as manure for turnips, &c.

I append the Balance Sheet of my Farm Account for the past year, together with the Return of Statistics and cropping.

I have the honour to be, Sir, your very obedient servant,

GARRET FLYNN, Teacher.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

BALANCE SHEET.

Dr.

	£	s.	d.
To Amount of Valuation at commencement of year,	16	13	0
,, paid for Rent and Taxes,	3	10	0
,, ,, Seeds, Lime, and Manure,	2	3	0
,, ,, Cattle,	3	8	0
,, ,, New Farming Implements,	0	2	0
,, ,, Labour,	5	3	6
,, Gratuitous Labour of Pupils,	1	0	0
Profit and Loss, for balance, being gain on the year,	10	6	0
	£42	5	6

CONTRA.

Cr.

	£	s.	d.
By amount received for Grain,	1	18	0
,, ,, Potatoes,	1	1	0
Do. used in house,	5	0	0
,, ,, Cattle,	3	12	6
,, ,, Dairy Produce,	2	0	0
Do. used in house,	4	0	0
,, of Inventory taken at the close of the year, inclusive of proportion of unexhausted improvements,	24	14	0
	£42	5	6

APPENDIX K.

11. Appendix to Dr. Kirkpatrick's Report.

Kildinan Model Farm.

TABLE showing the CROPPING of the Kildinan Ordinary Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Potatoes,	1 3 0	From the 1st to 20th March,	From 16th Oct. to end of Dec.,	3 barrels,	25 barrels,	4 16 4	0 0 9½*p.*	Notwithstanding the small return of this crop, it has been considered the best in the neighbourhood, many having a complete loss of all expenses.
Oats,	0 3 0	20th March,	September,	12 stones,	8 barrels,	1 12 6	1 19 6	
Turnips,	0 2 20	From 1st to 15th July,	December,	4 lbs.,	10 tons,	3 5 0	1 15 0	This crop has been considered very good in this neighbourhood, considering the soil on which it was grown, being a barren mountain when it came into my possession.
Meadow,	0 3 0	—	July,	—	2 tons,	0 12 0	1 10 0	
Cabbage,	0 1 0	6th March,	—	—	—	5 10 0	3 0 0	
Flax,	0 2 0	4th May,	August,	2¼ bushels,	1 ton,	2 15 0	0 15 0	The flax crop proved extremely bad, being sown on the worst part of the farm.

(Signed), GARRETT FLYNN, Teacher.

I certify that the above returns are correct, according to the best of my knowledge and belief.

4th January, 1853.

C. O'DONOVAN, Manager.

44. GLOUNGARRAGH ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Waterford.

Gloungarragh Model Farm.

January, 1853.

SIR,—I beg to submit the following Report on the above Agricultural School for the year 1852.

Model Farm.—Two acres of land have been added to the Farm since the date of my last Report so that it now contains 12 statute acres.

Permanent Improvements.—The useless fences have nearly all been levelled, bringing into cultivation nearly half an acre of ground, which before was not only waste, but rendered the working of the farm difficult and expensive.

Remarks on the Cultivation.—The green crops, turnips, mangels, rye, and winter vetches, were very good, considering the quality of the land; the manure applied to the turnips was farm-yard, 2 cwt. of guano, (30 barrels of lime being applied the previous autumn); and to the mangels, farm-yard, 2 cwt. of salt, and 2 cwt. of guano per acre. These crops amply repaid the cost of cultivation, with considerable profit, as will be seen by reference to the "Statistics" of the Farm. The turnips grew very large and sound, so that there could easily be found 12 of them to weigh 1 cwt. I feel a pleasure in stating that the turnips and mangels have fully realized one of the objects to be desired by farms of this kind, by showing to the surrounding neighbourhood, what the land can yield *with profit*, by careful cultivation and proper manures. I beg to add that this observation is not made through egotism, but from remarks made by persons who have seen the crops.

It is the intention of the Patron to commence the erection of the farm offices and other buildings during the ensuing spring—so that after this year, the farm can be divided regularly, and a proper rotation followed.

By reference to the Statistics of the Farm and "Balance Sheet," it will be seen that the *agricultural produce* and the *general profits* have had a steady increase this year over last. The agricultural produce would have been much more only for the inferior oat crop—the greater part of the land on which it grew being hilly, and the soil poor and shallow.

The attendance of children at the School has also increased during the year, the average being for the year 1851 only 52 boys, while for the present it is 59. On the whole, I trust that the general management of the School and Farm has given satisfaction.

I have the honour to remain, Sir, your very obedient servant,

JAMES WALSH.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

BALANCE SHEET for the Year ending 31st December, 1852.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To Amount of Valuation at commencement of year,	22	10	0	By Amount received for Grain,	5	0	3
,, paid in Rent and Taxes,	6	7	9	,, of Potatoes used in family,	5	0	0
,, paid for Seeds, Lime, Manure, &c.,	8	11	9	,, received for Cattle sold,	2	8	0
,, paid for Cattle during the year,	11	7	6	,, of Dairy Produce,	7	4	0
,, paid for Repairs of Implements,	1	2	6	,, for Eggs and Poultry,	0	12	6
,, paid for Labour,	11	0	0	,, of Inventory and Valuation taken at the close of year,	61	10	3
,, of Gratuitous Labour of Pupils,	3	0	0				
To Profit and Loss, being gain on year,	17	15	6				
	£81	15	0		£81	15	0

TABLE showing the CROPPING of the Gloungarragh Ordinary Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied. A. R. P.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c. £ s. d.	Profit or Loss per Statute Acre on the Culture. £ s. d.	Observations.
Turnips, Swedes, . .	1 0 0	2nd week in May,	December, . .	5 lbs., . .	20 tons, .	4 14 2	5 5 10*p.*	The manure applied was "farm-yard, 30 barrels of lime, and 2 cwt. of guano. As may be seen, it was excellent for the quality of the land, and amply repaid the cost of cultivation.
Mangels, . . .	1 0 0	Last week in April,	November, . .	5 lbs., . .	12 tons, .	4 4 2	4 15 10*p.*	The manure was "farm-yard," 2 cwt. of salt, and 2 cwt. of guano.
Oats, ...	3 0 0	1st week in April,	September, . .	14 stones, .	3 bar. 8⅔ st.	2 6 6	0 13 2*l.*	The greater portion of the land on which this crop grew was hilly, and the soil poor and shallow, hence it was very inferior.
Potatoes, . . .	1 0 0	1st week of March,	October, . .	4 bar. of 21 st	10 barrels,	4 14 2	0 5 10*p.*	
Meadow, . . .	2 0 0	Second crop, .	August, . .	—	3¼ tons, .	2 1 8	0 2 1*p.*	
Rye & Winter Vetches, succeeded by a stolen crop of White Turnips,	0 3 0	Rye and winter vetches in Oct., 1851. and the white turnips in July, 1852.	June, . . . November, .	—	Not weighed but valued.	3 11 2	1 15 5*p.*	

(Signed), JAMES WALSH, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

January 15, 1853. F. E. CURRY, Manager.

Appendix K.

II. Appendix to Dr. Kirkpatrick's Report.

Garryhill Model Farm.

45. Garryhill Ordinary Agricultural National School, County Carlow.

January, 1853.

Sir,—In submitting to you my Second Report on the above Agricultural School, I am much pleased in being able to state, that the example here shown is producing good results in the neighbourhood. There is an eagerness among the people to follow the example of improved husbandry which it affords.

I have carefully examined most of the green crops grown in this locality this year, and am happy in saying, that, with few exceptions, they were kept perfectly clean, there being no such thing as headlands or waste land in those fields in which the root crops were grown. As many of the inhabitants are competitors for the premiums offered by the "Idrone Farming Society," for the best managed and cultivated root crop, they avail themselves of every improved mode of management in order to obtain such premiums.

My root crop this year was most successful.

It was admired by many, but particularly by the Inspector of the above-named society, who awarded me £5 5*s.* in premiums, viz., £1 for the best rood of mangel, £1 for clover, £1 10*s.* for turnips, 15*s.* for a calf, and £1 for general farm management.

The live stock are house-fed during the whole year. The rule for feeding the cattle is "to give often, and little at a time." Everything that is considered serviceable to their health and comfort is carefully attended to.

Farm offices.—The Patron, Earl of Bessborough, has recently erected a neat and substantial cow-house and piggery on the farm, which affords much satisfaction in attending the stock. The people of this district have every reason to feel deeply grateful to his Lordship for the interest manifested by him for the promotion of agricultural improvement in general, and the welfare of this school in particular.

Agricultural Class.—This class consists of 12 boys, who receive agricultural instruction, for half an hour, on each of the first five days of the week. Four of them form the "Industrial Class," and are very useful in attending the stock and doing the light work of the farm. They continue to give me great satisfaction.

In conclusion, I would beg to return my best thanks to J. Blacket, Esq., who has shown a great interest in the success of this School and Model Farm.

I am, Sir, your obedient servant,

Loughlin Ryan.

Dr. Kirkpatrick,
Agricultural Inspector.

SUMMARY of the Year and BALANCE SHEET for 1852.

Dr.	£	*s.*	*d.*	*Cr.*	£	*s.*	*d.*
To Amount of Valuation at commencement of year, .	27	12	6	By Amount of Pigs, ...	16	8	0
,, ,, paid for Rent and Taxes, ...	3	13	6	,, ,, Cattle, ...	5	7	0
,, ,, for a Cow, ...	6	6	0	,, ,, Poultry, ...	0	10	0
,, ,, for Pigs, ...	3	10	0	,, ,, Grain, ...	3	5	0
,, ,, for Hay, ...	3	16	0	,, ,, Dairy Produce, ...	6	0	0
,, ,, for Implements, ...	0	3	6	,, ,, Milk and Butter used in house, . .	2	8	0
,, ,, for Labour, ...	5	9	10	By Amount of Valuation at close of the year 1852, .	42	13	0
Gratuitous Labour of Pupils, . . .	3	18	0				
Profit and Loss for balance, being gain on the year, ...	22	1	8				
	£76	11	0		£76	11	0

The sum of £4 13*s.* 7*d.* paid by the Patron to the "Industrial Class" is included in the amount of £5 9*s.* 10*d.* charged for Labour.

TABLE showing the CROPPING of the Garryhill Ordinary Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Oats,	2 1 18	End of March,	August,	10 stones,	38 stones,	1 4 6	0 2 8*p.*	The half sown after green crop was pretty fair, but the half sown on lea was very bad, as this division has not yet been manured.
Mangels,	0 1 20	1st May,	24th November,	3 lbs.,	17 tons,	2 5 6	10 9 6*p.*	Manure not included in expense of cultivation.
Turnips,	0 2 10	22nd May,	1st December,	4 lbs.,	24 tons,	2 10 0	9 10 0*p.*	Manure not included in expense of cultivation.
Potatoes,	0 1 0	1st March,	October,	11 cwts.	5½ tons,	4 16 8	6 3 4*p.*	Manure not included in expense of cultivation. One-fourth deducted for diseased potatoes.
Clover for soiling,	1 0 30	—	—	—	Not ascertained,	—	—	This was used in house-feeding the stock.
Winter Vetches,	0 0 30	—	—	—	—	—	—	Not ascertained.

(Signed), LOUGHLIN RYAN, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

3rd January, 1853. JOHN BLACKET, Manager.

46. TWO-MILE-HOUSE ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Kildare.

SUMMARY of the Year and BALANCE SHEET.

Dr.	£	s.	d.		*Cr.* £	s.	d.
To Amount of Valuation at commencement of year, .	42	14	2	By Amount received for Grain, ...	15	15	3½
,, ,, paid for Rent and Taxes, ...	4	19	7½	,, ,, ,, Potatoes and Roots, . .	9	17	0
,, ,, ,, Seed, Lime, and Manure, . .	11	15	2½	,, ,, ,, Cattle sold, ...	8	18	3
,, ,, ,, Cattle during year, . . .	3	10	0	,, ,, ,, Dairy Produce, . . .	9	13	3
,, ,, ,, Labour, ...	4	10	0	,, ,, ,, Eggs and Poultry, . . .	0	10	0
,, ,, Gratuitous Labour of Pupils, . . .	6	10	0	Amount of Inventory and Valuation taken at close of year, ...	40	7	0
,, ,, Profit and Loss, being gain on year, . .	11	0	11½				
	£85	0	9½		£85	0	9½

TABLE showing the CROPPING of the Two-mile-house Ordinary Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Potatoes,	0 3 39	Feb. and March,	September,	13 cwts.	2 tons,	9 0 0	3 13 4*l.*	
Turnips,	0 1 28	May,	December,	3 lbs.,	19 tons,	7 10 0	2 0 0*p.*	
Cabbages,	0 0 14	March & April,	Sept. and October,	1,900 plants,	12 tons,	8 10 0	—	
Parsnips,	0 0 3	April,	November,	7 lbs.,	8½ tons,	7 10 0	9 10 0*p.*	
Carrots,	0 0 3	April,	November,	7 lbs.,	8 tons,	7 10 0	4 10 0*p.*	
Oats,	2 0 35	March,	September,	17 stones,	18 cwt.,	3 5 0	1 12 9*p.*	
New Grass,	0 2 9	May,	June,	2½ bush. & 9 lbs. clov.,	5 tons,	1 15 0	—	Almost all consumed green.
Winter Vetches,	0 1 15	September,	Used green,	12 stones,	7 tons,	2 7 0	Not computed	Consumed green, with the exception of a small patch for seed.
Waste by ½ road, &c.,	0 0 32							
Total,	4 3 17							
Stolen crop of Rape after Winter Vetches, now growing,	0 1 15	—	—	—	—	—	—	

(Signed), PATRICK WALSH, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

31st December, 1852.

TIMOTHY KAVANAGH, Manager.

47. OONING ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Kilkenny.

Ooning Model Farm.

January, 1853.

SIR,—In compliance with your directions, I forward you the "Farm Account Book," and Annual Report of the Ooning Ordinary Agricultural Model Farm for the year 1852.

The farm, which contains 4A. 2R. 7P., is divided into four equal parts, on which I have carried out a "four-course shift;" and this being the fourth year of my occupation, I have just completed the rotation.

The crops cultivated this year were—one-fourth the whole under green fallow crops, viz: turnips, mangels, potatoes, parsnips, cabbages, &c., one-fourth under clover and grass, of which I made hay; one half the oats, half of which, or one-fourth the whole being laid down with clover and grass-seeds; twenty perches of vetches as a stolen crop, which I find to answer remarkably well for feeding pigs.

I planted the potatoes in drills across ridges five feet broad, with cabbages planted in the brows, at intervals of six feet. As the cabbages were not planted till May, they did not interfere much with the potato crop. As the preparatory and after-culture of the other crops is similar to that usually practised, I presume I need not trouble you with further details on this head.

The "Agricultural Class" read one lesson daily in some of the agricultural works furnished by the Board. They are also required to point out the principal errors in the old system of farming, together with the remedies by which they can be obviated. By the knowledge thus acquired, the pupils exercise an important influence on their fathers, and neighbouring farmers, in eradicating from their minds those old prejudices which have so long opposed such an insuperable obstacle to the progress of improved agriculture. You would rarely find in this locality two grain crops taken in succession, as the system of alternate husbandry is becoming very generally practised here.

As my Returns show that I have not a cow at present, the default might be ascribed to a want of economy or of energy on my part. I therefore beg to trouble you with a few remarks in my own vindication.

In the year of 1848 I took charge of this farm, almost destitute of capital. I had a family of six persons to support out of a salary of £22 per annum; yet I contrived to purchase a cow, which I unfortunately lost on the succeeding year, thereby sustaining a loss of £6. Yet I replaced her in a short time by another cow, which I kept till last May. But then the prevalence of protracted illness in my family, with other pecuniary losses which I have sustained, and which it might be out of place here to detail, left me no

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Ooning Model Farm.

alternative but to sell my cow, to extricate myself from the embarrassments in which I was involved. Hoping that the season of adversity has passed, and that by proceeding with the same spirit of enterprise with which I commenced, I shall ere long, I trust, with God's help, be enabled to procure every requisite essential to a complete, efficient, and creditable system of farming.

I have the honour to remain, Sir, your very obedient servant,

JOHN RODGERS.

Thomas Kirkpatrick, Esq., M.D.,
Inspector of National Agricultural Schools.

GREEN CROP CULTURE.

	£	s.	d.
Digging the stubble land, in Autumn, per Irish acre,	1	0	0
A second digging in February, ... ,,	0	15	0
Ploughing and Harrowing in May, . . . ,,	0	12	0
Picking and Carting of Weeds, ... ,,	0	4	0
Making Drills and covering them, . . . ,,	0	12	0
Carting out Manure;—three Horses and six Men, ,,	0	11	0
Manure—40 tons, at 1*s.* 6*d.* per ton, . . . ,,	3	0	0
Thinning the young Plants, ... ,,	0	3	0
Hoeing three times, and Weeding, . . . ,,	0	8	0
Digging;—eight Men, at 8*d.* per day, . . ,,	0	5	4
Harvesting, ... ,,	0	5	0
Seed, ... ,,	0	4	0
Rent and Rates, ... ,,	2	2	0
Cost per Irish acre, ...	10	1	4
Cost per Statute acre, ...	6	4	2

EXPENSE OF GRAIN CROP CULTURE.

	£	s.	d.
Digging the land, ... per Irish acre,	1	0	0
Seed, ... ,,	0	11	0
Sowing, ... ,,	0	13	6
Reaping and Binding, ... ,,	0	13	0
Carting home and Stacking, ... ,,	0	4	0
Threshing, Winnowing, and taking to Market, ,,	0	11	0
Rent and Rates, ... ,,	2	2	0
Expense of Culture per Irish acre, ...	5	14	6
Expense of Culture per Statute acre, ...	3	10	7
Labour per Statute acre on Grain crop, ...	1	17	11
Labour per Statute acre on Green crop, ...	2	18	9

II. Appendix to Dr. Kirkpatrick's Report.

Ooning Model Farm.

ESTIMATED VALUE OF CROPPING PER STATUTE ACRE.

	£	s.	d.
Turnips, 12 tons, at 13s. 4d. per ton,	8	0	0
Mangels, 11 tons, at 15s. per ton,	8	5	0
Potatoes, 4 tons, or 80 cwts., or 640 stones, at 3½d. per stone,	9	6	8
Cabbage,	8	0	0
Parsnips and Carrots, 6 tons, at 30s. per ton,	9	0	0
Oats, 7 barrels, at 10s. per barrel,	3	10	0
Straw, 1 ton,	0	10	0
Clover hay, 2½ tons, at £1 per ton,	2	10	0

ESTIMATION OF TOTAL LABOUR.

A.	R.	P.		£	s.	d.	£	s.	d.
1	0	23	Green crop, at 2 18 9 per acre,				3	7	1
2	1	3	Grain crop, at 1 17 11 per acre,				4	6	0
			Labour on Vetches and Hay,				0	15	0
			Total expense of Labour,				8	8	1

ESTIMATED VALUE OF TOTAL PRODUCE RAISED.

	A.	R.	P.		tns.	cwt.	s.	d.		£	s.	d.
Turnips,	0	2	17	at 12 tons per acre,	7	5½	at 13	4	per ton,	4	17	0
Mangels,	0	0	32	at 11 tons per acre,	2	4	at 15	0	per ton,	1	13	0
Potatoes,	0	0	32	at 4 tons per acre,	128	stns.	at 3½		per stn.,	1	17	4
Cabbage,	0	0	14	at £8 per acre,						0	14	0
Carrots, Parsnips,	0	0	8	at £9 per acre,						0	10	6
Oats,	2	1	3	at 7 brls. per acre,	16	brls.	at 10s.		per brl.,	8	0	0
Clover,	1	0	22	at 2½ tns. per acre,	2	tns. 18	cwt.	at £1	per tn.,	2	18	0
Oat-straw,	at 1 ton per acre, 2 tons 5 cwt. at 6d. per cwt.,									1	2	6
Vetches,	20 perches at £3 per acre,									0	7	6
										21	19	10

Balance Sheet of Farm Accounts for the year ended 31st December, 1852.

Dr.	£	*s.*	*d.*
To Amount of Valuation at commencement of the year,	21	19	4
,, paid Rent and Taxes,	5	13	8
,, ,, for Seeds, Manure, &c.,	2	2	10
,, ,, Cattle,	2	7	0
,, ,, Labour,	2	15	10
,, Labour of "Industrial Class,"	5	0	0
,, Profit and Loss for Balance, being gain on the year,	2	2	8
	£42	1	4

Cr.	£	*s.*	*d.*
By Amount received for Grain,	10	18	0
,, ,, Potatoes and Roots,	1	17	4
,, ,, Cattle sold,	9	7	0
,, ,, Dairy Produce,	1	16	0
By Amount of Inventory and Valuation taken at close of year,	18	3	0
	£42	1	4

TABLE showing the CROPPING of the Ooning Ordinary Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied. A. R. P.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c. £ s. d.	Profit or Loss per Statute Acre on the Culture. £ s. d.	Observations.
Turnips,	0 2 17	May, June, & July,	December,	3 lbs.,	12 tons,	6 4 2	1 15 10*p.*	Growth very tardy in June, which I attribute to incessant rain.
Mangels,	0 0 32	1st week in May,	December,	4 lbs.,	11 tons,	6 4 2	2 0 10*p.*	
Potatoes,	0 0 32	10th March,	July, August, Sept.,	10 cwts.,	4 tons,	8 14 2	0 12 6*p.*	About one-fourth diseased.
Cabbage,	0 0 14	Mar., April, & May,	From June to Jan.,	3,650 plants,	—	6 4 2	1 15 10*p.*	Raised by liquid manure.
Carrots, Parsnips,	0 0 8	6th April,	November,	6 lbs.,	4 tons,	6 4 2	2 15 10*p.*	
Oats,	2 1 3	15th April,	August,	15 stones,	7 barrels, 1 tn. straw,	3 10 7	0 9 5*p.*	Much injured by the wire-worm in the month of May.
Clover and Grass,	1 0 22	April, 1851,	July and October,	10lbs. Clover, 1 bsh. Italian Rye-grass,	2½ tons Hay,	1 17 10	0 13 0*p.*	
Vetches,	0 0 20	October, 1851,	May and June,	12 stones,	16 tons,	2 10 0	0 10 0*p.*	

(Signed), JOHN RODGERS, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

8th January, 1853. JOHN BLACKET, Manager.

Appendix K.

II. Appendix to Dr. Kirkpatrick's Report.

48. Piltown Ordinary Agricultural National School, County Kilkenny.

January, 1853.

Piltown Model Farm.

Sir,—In submitting to you my Second Report on the Piltown School and Model Farm, it gives me great pleasure to be able to state that both have made considerable progress during the year just ended.

The farm has been brought under the "four-course rotation," and the office houses, yard, &c., have been completed in a satisfactory manner.

The cultivation of the crops differs little from that which is pursued on every well regulated farm. As regards the cultivation of the potato, I have been very successful in producing an average return of sound tubers (eight tons to the statute acre). The course of culture pursued was as follows :—Previous to the time of planting in the latter part of February, the sets were well dusted with lime to prevent their "bleeding," as well as to guard against the attacks of slugs. The manure applied was street manure, which consisted of a mixture of animal and mineral substances, the latter part being chiefly of a calcareous nature. The soundness of the crop is mainly attributable to the particular nature of this manure, as I invariably found, not only on this farm, but on others in the district, that wherever the crop was manured with manure of highly enriching nature, the result was a greater or less degree of failure. On the first appearance of the blight, the stalks were pulled, and carted to the dung heap, a practice which cannot be too strongly recommended ; the drills were afterwards earthed and rolled, to prevent the rains injuring the potato.

From the nature of the soil and climate of this district, stolen crops succeed remarkably well, so much so, that on twenty perches of vetches as a main crop, succeeded by turnips, I fed two cows for the space of four months, giving six feeds each day.

The extent of ground under cultivation is 5a. 1r. 8p., statute measure, the remainder (1a. 0r. 34p.) being occupied by yard, garden, school gardens, and road ; on this extent I have kept two milch cows, and fattened one, together with six pigs.

The "Industrial Class" still continues to give every satisfaction, and the cheerfulness with which they perform their appointed work is very gratifying. Agricultural instruction is given in the school-room for half an hour each day, to a class of thirty pupils, which is divided into two sections, a senior and junior; the latter being taught only the rudiments of scientific agriculture, while the instruction given to the former is more extensive, embracing the principles of geology, chemistry, and vegetable physiology. Several have made

respectable progress in the two latter branches. But while paying due attention to the scientific part of agriculture, the practical details are not neglected.

School Gardens.—I mentioned in last year's Report, that a portion of the farm was set apart for School Gardens. Early in spring, eight boys took charge of eight small plots, and prepared them for cropping. The crops cultivated, were cabbages of sorts, parsnips, carrots, onions, beans, lettuces, turnips, and mangels; each boy provided manure, the seeds being presented by Lord Bessborough. The crops were used at home, by their respective families.

I am happy to be able to say, that the owners of these allotments took an interest and a pleasure in the management of their little gardens, exhibiting a laudable emulation as to who could raise the best crops and keep the neatest garden.

In the course of the year, a marked improvement was visible in the boys, not only as regards improvement in their ordinary school business, but also in their moral conduct. Instead of idling about the roads, every spare moment they could command after school duties was devoted to their gardens. As a proof of the benefits resulting from such training, I may mention that at the "Iverk Farming Society's" annual cattle show, their root crops were exhibited, and their enormous size and weight attracted the marked attention of the visiters and farmers of the district. One of the boys is now apprenticed as a gardener, the superior neatness of his garden being the only recommendation required. He is now giving every satisfaction to his patron.

I am, Sir, your obedient servant,

ROBERT S. CUNNINGHAM.

To Thomas Kirkpatrick, Esq.,
Agricultural Inspector of National Schools.

I beg leave to submit the following observations on the subject of Agricultural Education, which I have copied from the entries of visiters in the Report Book of this School:—

"Visited this school, and heard the agricultural and literary class examined, and feel convinced, that it is perfectly practicable (from the intelligence and proficiency evinced) to combine under the same Teacher, agricultural, and general literary instruction.

"Walked over the farm and school gardens, tilled by the pupils generally, and the "Industrial Class" in particular, and was much pleased with the useful nature of the work done, and of the instruction given.

EDWARD N. HOARE,
Dean of Waterford.

7th April, 1852.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Piltown Model Farm.

"Resolved,—That having been present at a public examination of the Piltown Agricultural National School, held by the Inspector (Mr. Graham), we are fully impressed with the superior, literary, and moral education given under "the system" (to children attending the School), of different religious denominations. We were also gratified at the amount of agricultural instruction afforded, and the state of the farm tilled by the pupils of the School, affording the best proof that *combined literary and agricultural instruction can be imparted by the same Teacher, and in the same School, in an efficient manner.*

"BESSBOROUGH.
"CHARLES HARTE, Rector of Whitechurch.
"EDWARD N. HOARE, Dean of Waterford.
"SACKVILLE BOURKE, Rector of Hatheroge.
"WALTER M'DONALD, P.P.

"September 13, 1852."

SUMMARY of the Year and BALANCE SHEET.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To Amount of Valuation at commencement of year,	24	8	0	By Amount received for Grain,	6	6	0
,, paid for Rent, Taxes, &c.,	10	12	10	,, Potatoes, Roots, &c.,	7	6	0
,, ,, Seeds and Manure,	6	6	9	,, Cattle sold,	20	4	0
,, ,, Cattle during the year,	29	11	6	,, Dairy produce,	20	17	3
,, ,, Farming Implements,	2	13	3	By Amount of Inventory and Valuation taken at close of the year,	44	19	6
,, ,, Labour,	5	2	4				
,, Labour of "Industrial Class,"	10	8	0				
To Profit and Loss for balance, being gain,	10	10	1				
	£99	12	9		£99	12	9

TABLE showing the CROPPING of the Piltown Ordinary Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Oats (with seeds), . .	1 0 34	27th March, .	9th August, . .	15 stones, .	119 stones,	4 1 6	0 11 6*p.*	
Mangels, . . .	0 2 32	3rd May, . .	22nd November, .	4 lbs., . .	20 tons, .	7 12 6	4 7 6*p.*	
Turnips, Swedish, .	0 1 0	10th May, . .	11th December, .	3 lbs., . .	18 tons, .	6 1 6	2 18 6*p.*	
Vetches, . . .	0 0 34	October, 1851, .	Consumed by stock in May, .	14 stns., mixed with 3 stn. Rye,	14 tons, .	3 1 6	3 4 6*p.*	In the cultivation of this crop, no manure charged.
Succeeded by Aberdeen Turnips .	—	19th June, . .	Consumed by stock in Nov. & Dec., .	3 lbs., .	16 tons, .	3 10 0	2 18 0*p.*	No rent charged.
Oats, ...	1 0 14	13th March, .	17th August, . .	15 stones, .	91 stones, .	4 0 2	0 5 10*p.*	
Potatoes, . . .	0 2 8	1st March, . .	25th September, .	13 cwt., .	8 tns. 10 cwt.	7 6 4	4 0 4*p.*	
Clover, . . .	1 1 6	Sown with Oats in 1851,	1st cutting made into Hay in June—stock house-fed with 2nd and 3rd cutting, .	8lbs. Clover, 1½ bushels of Grass,	—	2 16 0	3 6 0*p.*	An excellent crop.
Garden crops, . .	0 2 0	—	—	—	—	—	—	Consisting of Potatoes, Cabbages, Parsnips, Carrots, Onions, and Peas.
Total, . . .	5 3 8							

(Signed), ROBERT S. CUNNINGHAM, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

8th January, 1853. JOHN BLACKET, Manager.

49. KILSKYRE ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Meath.

Kilskyre Model Farm.

January 7, 1853.

SIR,—In submitting my Report for the year 1852, I deem it unnecessary to give a detailed account of the course of cropping pursued, as it is the same as that described in last year's Report.

In stating the "success attending my management," I have to refer to the improved condition of the Model Farm, as also to the increased produce of the same. The farm now presents an appearance of rich fertility, instead of that neglected and profitless state in which it was prior to coming into my possession. It is now quite level, all rocks removed from the under as well as from the surface soil, and its cultivation can now be easily and efficiently effected by the spade or plough. The farm has been fenced in, the greater portion of it thorough drained, and the quicks hitherto planted, will shortly afford shelter and protection from trespass.

Agricultural Instruction.—There are from 25 to 40 pupils in the Agricultural Class (the average number is 30), whose knowledge of the elementary principles of agriculture is considerable, and whose practical application of the same has been shown in the luxuriant produce of green crops grown on the farm. I do not consider it as the last among the advantages arising from practical operations, that the cleansing of the land from weeds, &c., in the after-management, has contributed to produce this effect. It would be wrong perhaps for me to state that the improving tillage of the land in this locality owes its origin to the school, or to my example; however, I feel confident that the correct principles of agriculture taught therein, and the daily employment of the pupils on a well-managed farm, cannot fail to develop the latent energies of our young Agriculturists; and will, it is hoped, generally diffuse more correct methods of tillage, and establish in this neighbourhood a better system of cultivation.

In my last Report I referred to the "Industrial Class," as being the most efficient in their literary as well as their agricultural studies; and in order to have the opinion on this matter of the Manager (Rev. Mr. Kelly), who takes a lively interest in watching and promoting the progress of this School, I sent him the following note:—

"REV. SIR,—As I am sending my Report on the Agricultural Department of this School to the Board of National Education, I would feel obliged by your favouring me with your opinion as to whether the employment of the children on the Model Farm interferes with their literary advancement.

"I am, Rev. Sir, your very obedient servant,

"EDWARD CLARKE, Teacher.

"Rev. P. Kelly, P.P., Manager."

APPENDIX K.

II. Appendix to Dr. Kirkpatrick'sReport.

Kilskyre Model Farm.

I now beg to submit his reply to the above request, which, you will perceive, confirms my statement on this matter :—

"Kilskyre, January 4, 1853.

"DEAR MR. CLARKE,—In reply to your inquiry, I can have no hesitation whatever in saying, that so far from those little duties imposed on the children in connexion with the Industrial School, interfering in any manner with their literary advancement, I should rather think that the reverse is the result.

"The children require some recreation during school hours: this is attained by their employment on the farm; and as those children belong in a great measure to that class, and will in due time constitute that class, destined for the cultivation of the land, any impediment (should it exist) to literary advancement, has its best and most profitable counterpoise in that agricultural knowledge which will enable them to maintain themselves by improved labour.

"Besides, you must know better than I do, and I think I am not mistaken, that some of your best scholars have been at all times your most constant and assiduous agriculturists, for instance, those who are Teachers in other National Schools, and others who have been selected to the office of Monitors in the Trim Model School.

"Such is the deliberate opinion on the question proposed to, dear Sir,

"Yours truly,

"PATRICK KELLY.

"To Mr. Clarke."

Hoping the foregoing Report may prove satisfactory,

I remain, Sir, your obedient servant,

EDWARD CLARKE.

Thomas Kirkpatrick, Esq., M.D.

BALANCE SHEET of Kilskyre Model Farm December 31, 1852

Dr.	£	*s.*	*d.*
To Amount of Valuation at commencement of year,	69	10	10½
,, paid in Rent and Taxes,	2	7	3
,, paid for Seeds, Lime, &c.,	9	9	7
,, Cattle during year,	43	13	0
,, paid for Labour,	5	15	9
,, of Gratuitous Labour of Pupils,	2	10	0
To Profit and Loss for balance, being gain on the year,	9	4	3½
	£142	10	9

Cr.	£	*s.*	*d.*
By Amount received for Grain,	1	4	0
,, Potatoes, &c.,	0	3	0
,, Cattle sold,	51	0	0
,, Dairy produce,	0	7	0½
By Amount of Milk and Butter used in Family,	4	0	0
,, received for Eggs, Poultry, &c.,	2	6	8½
,, of Inventory and Valuation at end of year,	83	10	0
	£142	10	9

TABLE showing the CROPPING of the Kilskyre Ordinary Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Oats,	0 3 9	15th March,	End of August,	8½ stones,	11½ barrels,	2 16 0	3 10 6*p.*	Oats valued at 11*s.* per barrel.
Potatoes,	0 1 0	End of February,	1st October,	5 barrels,	50 barrels,	6 10 0	6 0 0*p.*	White Rocks, all sound; Kemps much damaged.
Swede Turnips,	0 1 15	Last week in May,	As required,	4 lbs.,	25 tons,	6 0 0	6 10 0*p.*	Turnip tops all used by the Cattle, weighed 4⅘ tons per statute Acre.
Mangels,	0 0 25	1st week in May,	1st week in Nov.,	3 lbs.,	22 tons,	6 10 0	10 0 0*p.*	Mangel tops all used by Pigs and Cattle, weighed 6¾ tons per statute acre.
Cabbage,	0 0 8	1st week in April,	As required,	—	Not weighed,	Not known	—	
Grass,	0 3 9	With the Oats,	May and Sept.,	2½ bushels with clover,	4 tons two cuttings included,	2 15 0	2 5 0*p.*	Grass excellent.
Cabbage plants, seed,	0 0 9	5th August, after potatoes,	Transplanted in October,	—	—	—	—	Stolen crops after potatoes.

N.B.—The above estimate is taken proportional to the produce raised for 1852, and the prices in accordance with the current rates of this neighbourhood.

(Signed), EDWARD CLARKE, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

January 6, 1853. PATRICK KELLY, Manager.

50. BALLINVALLY ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Westmeath.

31st December, 1852.

Ballinvally Model Farm.

SIR,—In submitting my second Report on the Agricultural Department of the above School, the chief points of advancement during the past year, to which I wish to direct attention, are :—1st, an improved crop of clover and Italian rye-grass, which enabled me to house-feed the stock during the entire summer; 2nd, the providing of enough of manure for the farm, besides manuring half a rood cultivated as a garden, from no resource but the "midden" and the liquid manure tank; 3rd, the raising an excellent parsnip crop in a soil not at all naturally suited to them—the treatment of this crop being somewhat peculiar, I give it in a note.

Some stolen crops were raised, viz. :—cabbages after winter vetches, Jerusalem artichokes after early cabbages, and rape after early dug potatoes, making altogether nearly half a rood.

The profits for the year have been considerably diminished by a deficient crop of oats, the immediate cause of which, was an attack of the red-worm, that cut off almost half the crop on its coming up. Liquid-manure was applied without effect.

According as the green crop was removed, the ground between the drills was immediately dug and slightly turned up on both sides, which not only served the double purpose of loosening the soil, and preventing the growth of weeds, but it further accomplished the twofold object of preventing the dissipation of the manure exposed in raising the crop, and of turning the fallen leaves to the best advantage. This method seems preferable to digging the whole of the ground, as it is a better means of preserving the manure through the winter, and is also less laborious. At all events it is one of the many cases in which spade culture has a vast advantage over ploughing.

Agricultural Instruction.—A class of 18 boys (averaging about 10 daily) has been instructed during the year in the most useful parts of the theory and practice of Agriculture, and some of the junior boys have been lately admitted into the class, on the recommendation of the Agricultural Sub-Inspector, who, at his visit in September last, expressed himself well pleased with the state of the School and Farm. The average attendance is low as compared with the entire number of the class; but it is the same with the total attendance of the School, because a large proportion of the boys come from a great distance, and many of them being grown up, they must spend a great part of the year in working at home.

There is scarcely a farmer in this neighbourhood who did not this year devote half his manured land to other green crops besides the potato. This is a step in the right direction, but they have still to enter on the all-important business

of *house-feeding*; and a great many of those having turnips, &c., treat them rather as the step-child, introduced by necessity, than as the foster-child of their own adoption. Increased knowledge is the remedy for these evils; and I can say (I hope without presumption), that this school is working most beneficially in its own little sphere, by gradually but effectually supplying the deficiency in this respect.

To effect so desirable an object the agricultural schools are eminently adapted; and next to a Teacher's own exertions, the best means of rendering his teaching practically successful, is a "*paid Industrial Class.*" I feel both disappointment and regret, that so powerful an auxiliary should be still wanting in this School, where, for many reasons, such is particularly required.

I may state in conclusion, that the farm is now in good working order; and it is a proof of the excellence of the system, that while being brought to this state, it constantly yielded a profitable return, though many difficulties and disappointments were encountered.

I am, Sir, your very obedient servant,

JOHN LYONS.

Dr. Kirkpatrick,
Agricultural Inspector.

METHOD of raising PARSNIPS successfully adopted on a light, sandy soil.

A quantity of compost, consisting of ashes, bog-mould, and fresh earth, was first provided. The ashes is easily obtained by laying aside that from the house for a few days, and the bog-mould may be obtained from the turf rick, if not otherwise convenient.

The land intended for parsnips was deeply dug in the beginning of winter, and in March it was drilled, manured, and closed as for potatoes. A dibble was then provided about 4 feet long and 8 inches in circumference, with a step 18 inches from the pointed end. With this dibble holes were made, about 9 inches apart, in the centre of each drill, and filled with compost (a child may do this part of the work with his hands); three or four seeds were then dropped on the top of each and slightly covered with earth.

By this means a crop of nearly 1 cwt. to each square perch, statute measure, was obtained, the average circumference, of the roots being equal to that of the dibble, while many of them measured from 11 to 13 inches long, scarcely any of them being forked, and so good was the general appearance of the crop, that it was admired by the Agricultural Sub-Inspector,

as well as all who observed it. And this crop, it should be remarked, was in a soil where by all other means tried during the three previous years, the crop raised was either so bad as to be hardly worth digging, or so forked as to scarce pay the trouble of cleaning, while there was often a great loss of manure from dissipation in the loose soil.

The only probable objection that could be raised to the foregoing plan is that of its being too troublesome. But any one can convince himself by experiment that this objection is only apparent. This method cannot be too troublesome for a parsnip crop, when it is almost identical with the method of potato setting in the west of Ireland, and has been recommended as the general one by Professor Murphy, in his "Practical Instructor."

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Ballinvally Model Farm.

SUMMARY of the Year and BALANCE SHEET.

Dr.

	£	s.	d.
To Amount of Valuation at commencement of the year,	17	9	0
,, paid in Rent and Taxes,	2	3	10½
,, paid for Seeds, Hay, &c.,	4	17	8
,, paid for Cattle,	6	13	6
,, paid for Implements,	0	1	9
,, paid for Labour,	4	7	0
,, of Gratuitous Labour of Pupils,	1	0	0
To Profit and Loss for balance, being gain on the year,	8	11	3
	£45	4	0½

Cr.

	£	s.	d.
By amount received for Grain,	5	19	9
,, Roots, &c.,	3	3	5
,, Cattle,	9	11	11
,, Dairy produce,	7	11	10½
By amount of Inventory and Valuation taken at end of the year, inclusive of proportion of unexhausted improvements,	18	17	1
	£45	4	0½

TABLE showing the CROPPING of the Ballinvally Ordinary Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Swedes,	0 0 23	20th May to 8th June	November,	5 lbs.,	38¼ tons,	10 5 6	10 9 6*p.*	June sowing safe from fly, as last year.
Aberdeens,	0 0 9	24th June,	October and Nov.,	5 lbs.,	35 tons,	9 6 0	6 4 0*p.*	Indifferent, sowing season wet.
Mangels,	0 0 16	1st May,	November,	6 lbs.,	23 tons,	10 15 6	12 4 6*p.*	
Potatoes,	0 0 28	March,	20th July to 20th Oct.,	4 barrels,	4 tons,	10 18 0	2 8 0*p.*	One-third unsound.
Parsnips,	0 0 8	20th March,	November,	4 lbs.,	6½ tons,	11 5 0	10 5 0*p.*	
Oats,	1 0 30	26th March,	25th August,	15 stones,	7½ barrels,	3 18 0	0 17 0*p.*	One-half cut off by the wire-worm.
Clover, Italian rye-grass,	0 2 8	27th March,	May to September,	1 stone, 1 bushel,	Value, £5 11*s.*,	2 2 3	3 8 9*p.*	
Cabbages,	0 0 22	—	—	—	—	—	—	Not ascertained.
Vetches,	0 0 22							
Carrots, &c.,	0 0 4							

(Signed), JOHN LYONS, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief.

January 5, 1853.

CHARLES W. HAMILTON, Manager.

APPENDIX K.
II. Appendix to Dr. Kirkpatrick's Report.
Ballinvally Model Farm.

Appendix K.

II. Appendix to Dr. Kirkpatrick'sReport.

51. Clonmellon Ordinary Agricultural School, County Westmeath.

5th January, 1853.

Clonmellon Model Farm.

Sir,—In my Report of the Model Farm in connexion with the Clonmellon Ordinary Agricultural School, for the year 1851, I gave you in detail an account of the state in which I found the farm, and the means to which I had recourse for bringing it into a proper state of cultivation; it only remains for me now to state what I did during the year 1852, and the degree of success with which my labours have been attended.

As stated in my last Report, this farm contains 6a. 1r. 36p., statute measure, which is cultivated on a "four-course rotation." The division on which I had green crops last year was sown with oats on the 23rd of March, 17½ stones of seed to the acre; and, on the 18th of April, with red clover and a mixture of Italian rye-grass and brown hay-seed, lest the Italian alone would not succeed, as the soil is rather light. The ground intended for potatoes (clover lea) was ploughed, and that intended for turnips, mangels, and flax (reclaimed land), was carefully dug, in the month of November. The potatoes (Scotch Downs) were planted in beds 3½ feet wide, during the last week of March, and the brows of the beds planted with cabbage. Some farmers here have followed the same plan, and they are well pleased now to have a supply of cabbage to feed their cattle and pigs. The part of the green crop division which I intended for turnips, mangels, and flax, got a light ploughing and harrowing in the month of April.

Unfortunately, a great part of this division is a marsh, on which I bestowed a great deal of labour to bring it into cultivation; and, now that I have it partly drained, and the low parts raised to a proper level, it would prove one of the most profitable divisions on the farm, were the outlet for the water kept open—for want of which, and owing to the heavy rains in the months of July and August, two-thirds of the most promising of my mangel and turnip crops were inundated to such a degree that they failed altogether. The loss may be fairly stated at four tons of mangels, and three tons of Swedish turnips, say £5—a serious loss, and a great drawback on the profits of the farm for the present year. It is only right to say, that the patron, Sir Montague L. Chapman, Bart., previous to his leaving for Australia, gave orders to his steward to have a proper outlet built, to afford a free passage for the water, but the proprietor of the adjoining land where the stoppage is would not permit the improvement to be effected.

The third division was under oats on clover lea, sown 23rd March; and was ploughed during the first week of November, preparatory for green crops next season.

The fourth division was clover and Italian rye-grass, which I commenced cutting on the 17th of May, for house-feeding;

twenty perches, cut for soiling, fed a cow abundantly for four months. The part reserved for hay gave two good cuttings.

The number of boys in the "Agricultural Class" has increased considerably these few weeks past; and I am happy to say that they are becoming more anxious to read the "Agricultural Class Book," and more attentive to my instructions, since we were visited and had an examination by the Agricultural Sub-Inspector; and, by diligent perseverance, they hope to be found worthy of your approbation when you favour us with another visit.

I am, Sir, your obedient servant,

MICHAEL M'DERMOTT.

To Dr. Kirkpatrick,
Inspector of National Agricultural Schools.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Clonmellon Model Farm.

BALANCE SHEET of Farm Accounts for Year ended 31st December, 1852.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To Amount of Valuation at commencement of year,	26	15	1	By Amount received for Grain,	7	10	5½
,, Estimated Rent and Taxes,	13	14	11½	,, ,, Potatoes and Roots,	1	11	0
,, paid for Seeds and Manures,	3	11	5	,, ,, Dairy Produce,	1	4	4
,, ,, Cattle,	2	6	6	,, of Pork for use of family,	5	0	0
,, ,, Labour,	5	1	0½	,, of Potatoes for do.,	3	6	8
,, of Gratuitous Labour of Pupils,	1	6	0	,, Valuation taken at close of the year,	34	4	0
Profit and Loss, for balance, being gain on the year,	0	1	5½				
	£52	16	5½		£52	16	5½

TABLE showing the CROPPING of the Clonmellon Ordinary Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Oats, ...	2 2 1½	23rd March, .	21st August, . .	17½ stones, .	8 bar. 6 st.,	2 13 7	1 14 11	
Potatoes, . . .	0 1 34	18th to 20th March,	During the Autumn,	12½ cwts., .	56 cwts., .	3 15 2	5 7 10	
Turnips, . . .	0 2 9¾	27th May, . .	December, . .	4 lbs., . .	11 tons, .	1 9 4½	4 0 7½	Two-thirds destroyed by flood.
Mangels, . . .	0 1 5	4th May, . .	November, . .	5 lbs., . .	10 tons, .	1 9 7½	6 10 4½	
Flax, ...	0 0 9¾	3rd May, . .	16th August, . .	2½ bushels, .	5 cwts. 1 st..	3 17 11½	5 2 0½	*Riga* seed, saved by myself.
Rye-grass, . . .	1 2 20	—	—	—	3¼ tons, .	0 7 6	6 2 6	

(Signed,) MICHAEL M'DERMOTT, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief.

January 5, 1853. JAMES DOWLING, P.P., Manager.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Mullingar Model Farm.

52. MULLINGAR ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Westmeath.

January 5, 1853.

SIR,—Pursuant to instructions received from the Office of Education, I beg to furnish the following Report on the above School.

As this is my first Report, I may offer a few general observations; and, first, I have to acknowledge the kindness of Mrs. Cooper, the proprietress of the land. Upon my application, and when I had explained the object I had in view, she gave me the land at once, and at a lower figure than that proposed by others equally solvent; she has also given me the full advantage of the abatements she makes to her tenantry since the failure of the potato crop.

The Model Farm consists of 11 acres 35 perches, statute measure, and is all a reclaimed bog. It is situated on the North bank of the Royal Canal, about an English mile from the School. The surface-soil is, for the most part, peat, with a subsoil of marl, varying from one foot to an unascertained depth in some parts. The east side of the Farm is much lower than the west, and as the only outlet is into the Canal, it is not susceptible of draining under present circumstances. Agricultural enterprise must get a considerable impetus before the valley, of which it forms a part, experiences fully the influence of such improvement, in consequence of the great difficulties in the way of effecting it.

I had been establishing a "six-course rotation," but having given the east side of the Farm a fair trial, I find it is wholly unsuited to profitable cropping. I therefore intend to carry out a "three-course rotation" on half the land, leaving the lower half in grass.

In the routine of cultivation and cropping, there is nothing new to which I have to direct attention. The recommendation as to deep cultivation I have fully carried out, the nature of the soil affording ample facilities for this purpose, even by the labour of boys. The crops cultivated will be found fully detailed in the accompanying Returns. I have found that the different varieties of the cabbage tribe yield the heaviest crops on this description of soil. Forty perches planted with nonpareil in October, produced £4 10s. in cash, besides two feeds a day for four cows, during the months of May and June. Aware of its value, I have the brows of my potato ridges planted with cabbage 3 feet asunder, and though I admit that the potato crop may be deteriorated by its food being abstracted for the support of the cabbage, I am satisfied the loss thus sustained in the former, is nothing as a set-off against the value of the latter.

The "Industrial Class," consisting of eight boys regularly, and sometimes more, according to circumstances, attend to

work on the Farm for two hours each day, before or after school, according to appointment. They perform their appointed work with cheerfulness and alacrity; a pleasing indication of their industrious tendencies. Up to the present, except on rare occasions, none but the "Industrial Class" have an opportunity of witnessing or taking part in the agricultural operations, an evil of which I am fully sensible. The "Agricultural Class" in the School, including the "Industrial," numbers thirty. I observe they get their agricultural lessons with more ease and pleasure than they do their other lessons. In a country circumstanced as this is, where agricultural labour is, it may be said, the only one that is open to the great bulk of the population, it is highly important that the rising generation should get an education, mental and physical, to fit them for that avocation. The connexion of agriculture with the National Schools must have a beneficial effect in this way. The peculiar and improved system on which these little farms are laid out and cropped, must attract notice; the care taken to keep the crops clean; the abundance of manure always at hand; the house-fed cattle, healthful, and thriving on abundance of nutritious food; live stock improved, and bringing remunerative prices; with the land visibly improving in appearance and fertility;—all these cannot be witnessed without producing their proper effects. With such examples before them, the people will rapidly fall into an improved system of farm management, the only hope of permanent prosperity for the country.

Mullingar Model Farm.

I am, Sir, your very obedient servant,

PETER J. CRIBBEN, Teacher.

To Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

Summary of the Year and Balance Sheet.

Dr.

	£	s.	d.
To Amount paid in Rent and Taxes,	12	15	0
,, for Labour of all kinds,	30	0	0
,, Labour of "Industrial Class,"	10	0	0
,, for Seeds, Manures, &c.,	12	15	6
To Profit and Loss for Balance, being gain on the year,	17	19	6
	£83	10	0

Cr.

	£	s.	d.
By Amount received for Dairy Produce (Milk mostly sold new),	50	0	0
,, for Potatoes,	17	10	0
,, for Cabbage,	4	10	0
,, for Oats,	7	10	0
,, for Bere,	4	0	0
	£83	10	0

Note.—As an exact Inventory and Valuation was not taken at the commencement of the year, the amount is not entered on the Debit side of the Balance Sheet, but in order to counterbalance this, the amount of Inventory, &c., at close of the year (£77 5*s.* 6*d.*), and which is about equal to that at the commencement, is not entered on the Credit side.

TABLE showing the CROPPING of the Mullingar Ordinary Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Turnips,	1 0 34	From 15th June,	November, Dec.,	4 lbs.,	20 tons,	2 5 9	5 4 3*p.*	Stolen crop after winter and spring vetches, and winter cabbages.
Mangels,	0 2 16	4th week in April,	November,	4 lbs.,	15 tons,	2 10 0	4 10 0*p.*	First sowing missed, second sowing 25th May.
Potatoes,	1 0 18	1st Mar. & 1st May,	From 1st August,	100 stones,	cwt. cwt. 150 & 50,	8 0 0	12 0 0*p.*	Part planted 1st May, with common sorts were blighted early; all small but sound.
Cabbage,	1 0 20	Oct., May, July,	From June,	Not ascertained,	Not ascertained,	3 0 0	15 0 0*p.*	Stolen crop after vetches and potatoes.
Rape,	0 2 0	August & Sept.,	Still in ground,	Not ascertained,	Not ascertained,	Not ascertnd.	Not ascertnd.,	Promises a good supply of spring feeding.
Bere,	0 3 10	November,	August,	12 stones,	22½ cwts.,	2 7 6	3 7 6*p.*	Would yield better only it lodged.
Oats,	1 2 0	March,	August,	10 stones,	17½ cwts.,	2 13 8	2 6 4*l.*	Did not head at all in spots.
Vetches,	0 3 34	Oct. and March,	From May,	1½stn. mixed with oats,	20 tons,	2 19 6	—	Not valued.
	7 3 12							
Under Stolen crop,	2 3 14							
Under Tillage,	4 3 38							
In Grass,	6 0 37	—	—	—	—	—	—	Not valued.
Total,	11 0 35							

(Signed,) P. J. CRIBBEN, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

JOHN NICHOLLS, Manager.

Appendix K.

II. Appendix to Dr. Kirkpatrick's Report.

Delgany Model Farm.

53. Delgany Ordinary Agricultural School and Model Farm, County Wicklow.

January 1, 1853.

Sir,—In forwarding this my third Report on the Delgany Agricultural School, I feel much pleasure in being enabled to state, that all matters connected therewith continue in a satisfactory and progressive state.

Having, in my former reports, explained the management of the several crops, &c., and no material change having since taken place, I will at present be as brief as possible.

The accompanying "Table of Cropping" will give full information as to the cultivation and its results, and to a *careful reader*, will show what may be effected by the *industrious small farmer* with skilful management.

The weights of the several crops and the valuation have been taken by Mr. John Young, steward to the Patron, Peter La Touche, Esq., with the greatest possible accuracy.

It may be seen from the returns that the greatest source of profit is from *dairy produce*, new milk selling from 2*d.* to 2½*d.* per quart, and butter from 10*d.* to 1*s.* per pound. New milk is much the more profitable, but the abundance of stock in this locality gives rise to great competition.

That the example may be perfect, as little expenses as possible are incurred (with the exceptions of the purchase of seeds, straw, or a little manure) by the removal of the productions which should have been consumed on the place, and restored to the exhausted soil from which it had been taken.

From the house-feeding of cattle, and the economizing manures enabling us to manure one-third of the farm each year, with deep culture, the soil is making a clearly perceptible improvement. Trenching, which on my commencement was considered by almost all, and denounced by many as destructive to the soil, is now satisfactorily proved to be an efficient means of promoting the fertility of the soil. The crops exhibit the benefits of the judicious treatment bestowed on them, both in quick vegetation and ripening evenly. The only serious drawback with which we have to contend is that of the wire-worm, so destructive to the *corn crops*.

The operations on this farm are brought prominently under the notice of the public; the exposed site on which the land is situated, the divisions into which it is divided for the several crops stretching parallel from top to bottom of the field, afford great facilities for observation to the passengers going to and from the village, the leading road to which forms part of the boundary of the farm.

The growing of *green crops*, the house-feeding of cattle, and rearing of improved breeds of young stock, are making rapid progress in this vicinity; in fact, general farm management is much better attended to than heretofore, and with corresponding improvement.

School Department.—In this, as in the farm operations, no material change has occurred since my last Report. In fine weather the pupils, with a few exceptions, are most anxious to be permitted to work in the fields, where all exert their best skill to handle the tools as dexterously as possible, whilst others make themselves generally useful, attending to cattle, weeding, collecting manure, &c. The junior classes, and those deserving of punishment from any cause, are *detained inside* under a monitor, during the time for field labour.

If a premium were granted yearly to the most deserving boy, for taking charge of the junior classes in my absence, when in the field, and assisting generally, it might be attended with the most beneficial results. I have every reason to believe, from the many applications already made, and situated, as I am, remote from any similar institution, that a complete change in the state of the school might be effected by the admission of *boarders*.

Many of the parents and pupils are anxiously awaiting the formation of an "Industrial Class."

I remain, Sir, your very obedient servant,

ANDREW THOMPSON.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

EXPENDITURE and RECEIPTS of the Delgany Model Farm, for the Year ending 31st December, 1852.

Dr.	EXPENDITURE.	£	s.	d.		RECEIPTS.	*Cr.* £	s.	d.
To Amount of Valuation at commencement of Year,		58	5	10	By Amount received for Grain,		5	7	1
,,	Cash paid for Rent and Taxes, &c.,	6	13	6	,,	Potatoes, Roots, &c.,	6	10	0½
,,	,, Manure, Seeds, &c.,	1	10	6	,,	Cattle sold,	12	5	9
,,	,, Cattle during the Year,	10	2	0	,,	Dairy Produce,	14	3	11
,,	,, Farming Implements, &c.,	0	13	11	,,	Eggs, Poultry, &c.,	0	17	4½
,,	,, Labour,	1	12	6	By Amount of Potatoes and Vegetables used in Family,		4	0	0
,,	Gratuitous Labour of Pupils,	15	0	0	,,	Milk, Butter, and Eggs,	4	10	0
Profit and Loss for balance, being gain on the year,		23	6	8	,,	Valuation, at close of year,	69	10	9
	£117	4	11			£117	4	11	

TABLE showing the CROPPING of the Delgany Ordinary Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Italian rye-grass, 3 cuttings,	1 0 20	April,	16th May to 1st Nov.,	10 lbs. clover with Ital. rye	33 tons,	4 0 0	7 0 0*p.*	
Barley,	0 2 10	April,	August,	10 stones,	10 barrels,	2 12 10	3 7 2*p.*	Produce of corn is light from the effects of the wire-worm.
Oats,	0 2 10	March,	August,	10 stones,	10 barrels,	2 12 10	2 7 2*p.*	
Vetches,	0 0 20	October,	May and June,	10 stones,	23 tons,	3 18 0	2 17 0*p.*	
Turnips, Swedes,	0 0 20	May,	December,	5 lbs.,	21 tons,	8 0 0	7 15 0*p.*	After vetches.
Mangels,	1 0 16	May,	November,	6 lbs.,	36 tons,	10 8 4	18 7 8*p.*	Bulbs only.
Potatoes,	0 1 0	Nov. and Feb.,	June and October,	12 cwt.,	7 tons,	12 17 0	18 15 0*p.*	Part of Potatoes sold at 4*d.* per pound. The Potatoes and Beans were planted alternately in the drills.
Beans,	0 0 20	February,	September,	4 stones,	24 cwt.,	1 4 0	9 4 0*p.*	
Cabbages,	0 0 10	October,	May and June,	10,000 plants,	19 tons,	10 7 4	8 12 8*p.*	Stolen Crop.
Cabbages,	0 0 28	July and October,	In field,	10,000 plants,	—	4 0 0	3 0 0*p.*	After Potatoes.
Turnips, Swedes, and Dale's Hybrid,	0 0 30	June and July,	December and Oct.,	5 lbs.,	20 ton 10 cwt.	6 0 0	7 17 0*p.*	After Vetches and Potatoes.

(Signed,) ANDREW THOMPSON, Teacher.

I certify that the above Returns are correct according to the best of my knowledge and belief.

8th February, 1853. ROBERT H. PENNICK, Manager.

Appendix K.

II. Appendix to Dr. Kirkpatrick's Report.

54. Balla Ordinary Agricultural National School, County Mayo.

January 11, 1853.

Balla Model Farm.

Sir,—As directed in the circular issued from the Education Office, I beg to forward you the following Report :—

The extent of the farm is ten and a half statute acres. It is situated on the western side of a hill ; the soil being a light clay loam, of a depth varying from a few inches to as many feet.

The rotation adopted is the three-course.

The general cultivation of the farm, although far in advance of the agriculture of this neighbourhood, is yet far below that working point to which it is capable of being brought.

The principal difficulties with which I have had to contend, arise from the following causes :—

First. The want of sufficient capital.

Second. The want of suitable farm buildings. This I hope soon to see remedied, as the Manager is about to erect the necessary houses, &c.

Third. As to the diffusion of agricultural education in this locality, by means of this establishment, I find a serious impediment in the unwillingness of the pupils to work on the farm, even an hour each day, without remuneration.

When these obstacles shall be removed, I am perfectly satisfied that the institution will be a valuable one, both to the public, in an educational point of view, and the conductor, as a source of a pecuniary profit.

For an account of the cropping of the farm for 1852, I beg leave to refer you to the "Statistical Returns," merely remarking, that I was absolutely obliged to pursue the course therein stated, from the fact, that, in consequence of defective house and yard accommodation, I could not possibly secure a sufficiency of manure to enable me to cultivate it on a more regular system. . . . . .

I am, Sir, your obedient servant,

Patrick Thomas Shortle.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

SUMMARY of the Year and BALANCE SHEET.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To Amount valuation at commencement of year,	23	0	0	By Amount received for Grain,	13	5	0½
,, paid in Rent, Taxes, &c.,	9	5	10	,, for Cattle sold,	15	2	6
,, paid for Seed, Manure, &c.,	5	7	8½	,, for Potatoes, &c.,	4	8	11
,, paid for Cattle during the Year,	9	5	0	,, of Inventory and Valuation taken at close of the year, inclusive of proportion of unexhausted improvements,	47	12	0
,, paid for New Farming Implements and Repairs,	1	5	11½				
,, paid for Labour,	19	0	9½				
,, Gain,	13	3	2				
	£80	8	5½		£80	8	5½

TABLE showing the CROPPING of the Balla Ordinary Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Turnips,	1 0 0	May,	November,	3 lbs.,	20 tons,	5 10 0	4 10 0*p*	
Potatoes,	1 0 0	March,	Sept. and October,	11 cwt.,	8 tons,	7 0 0	11 0 0*p*	
Oats,	4 0 0	March,	August and Sept.,	2 cwt.,	15 cwt. 2 qrs.	2 14 8½	1 7 4½*p*	
Rape	2 0 0	July,	Not harvested,	14 lbs.,	Not estimated,	1 15 4½	—	
Parsnips,	0 0 10	April,	November,	16 lbs.,	—	4 0 0	—	
Carrots,	0 0 10	April,	November,	16 lbs.,	16 tons,	6 0 0	26 0 0	
Cabbages,	0 0 20	At various times,	Carried from the field when required,	—	Not estimated,	—	—	
Vetches,	0 2 0	April,	Do.,	16 stone,	Do.	2 10 0	—	

(Signed), PATRICK THOMAS SHORTLE, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief.

January 11, 1853. ROBERT LYNCH BLOSSE, Manager.

55. Cornafulla National School Ordinary Agricultural Farm, County Roscommon.

January, 1853.

Cornafulla Model Farm.

Sir,—In submitting my second Annual Report on the Cornafulla Ordinary Agricultural Farm, I am happy to inform you, that the hope expressed in my former Report, that "future results would compensate for past losses," has, to a certain extent, been realized, notwithstanding the operation of many unfavourable circumstances during the past year.

Having in my last Report described the very inferior quality, and the foul and exhausted state of the land when I got possession of it, a repetition of that description is unnecessary at present; however, in order to prove that that description was not exaggerated, I beg to remind you, that after detailing my system of cropping for 1851, I stated that "1a. 3r. 5p. of poor, wet, unreclaimed land, remain for future operations." The management of that portion presented embarrassing difficulties to a person in my position. It extended to a distance of 39 perches along the north-eastern boundary of the farm, and adjoined the public road. Its appearance in connexion with a Model Farm was unsightly and repulsive, and formed a striking contrast with the adjoining land under cultivation. Thorough-draining and subsoiling were out of the question, as there was no outlet for the water; yet I determined to undertake at least its *partial* reclamation. When the celebrated Sir Sidney Smith was preparing to besiege a certain fortress, deemed by some impregnable, he was told by a timid officer that it was *unattackable.* "Sir," said the valiant commander, "that word is not *English*, nor should any word of similar import be known to a British soldier." In like manner, I say, there is no variety of soil totally *irreclaimable;* and in proportion to the difficulties to be encountered, the skill, energy, and perseverance of the agriculturist should be exerted. Moreover, as the Commissioners of National Education are endeavouring to impart to the humble classes of the community the benefits of a sound, practical knowledge of agriculture, combined with literary instruction, I consider that the conductors of Agricultural Schools in connexion with the Board, should zealously assist in carrying out the views of the Commissioners; and though *immediate* pecuniary rewards may not be the result of their labours, yet they will enjoy the proud and pleasing reflection, that they have contributed to improve the social, moral, and intellectual condition of the people; and thereby increased the happiness, comfort, and prosperity of the community.

In addition to these considerations, I must observe—and the observation is peculiarly applicable to this locality—that on the great majority of holdings in this country, there is usually a patch of waste land, the improvement of which is totally neglected; the occupiers will tell you that it is not

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Cornafulla Model Farm.

worth the cost and trouble of improvement. If you cannot convince them that *immediate* benefits will be the result of cultivation, it is useless to talk of *prospective* advantages, and hence it is allowed to remain a perpetual eyesore on the farm.

I have been led into this digression in order to explain my motives for an undertaking which otherwise might appear to some a reckless and injudicious application of labour and capital.

I got the gripe of the boundary fence deepened and widened, for the purpose of receiving the surface water, and as early in the season as the land became partially dry, I got 3R. 2P. ploughed into ridges 4 feet wide. In the last week of March, I got the ridges pared with spades, in order to obtain a soft and level bed for the seed; the oats were sown immediately after, and covered from the furrows; the weeding was carefully attended to; the produce was 2 barrels 3 stones. The remaining portion, containing 1A. 0R. 3P., was dug into ridges 4 feet wide; dug a second time in June, and all the aquatic roots and plants carefully collected, dried, and burned, and the ashes added to the manure heap; the furrows were dug to the subsoil, and the loose earth spread over the ridges; drills were opened 2 feet apart, *across* the ridges; the manure put in the drills, which were closed without delay, and the turnip seed sown immediately after; the after-culture was carefully attended to; yet such was the cold, ungenial, and exhausted state of the soil, that the produce was only $2\frac{1}{2}$ tons.

Exclusive of the barren portion already described, I had 1A. 1R. 37P. prepared for green crops, consisting of potatoes, mangels, Swedes, and cabbages. As the statute acreable produce of these crops is given in the Returns of Statistics, it is unnecessary to repeat it here; but it may be useful to observe, in reference to the potatoes, that the variety sown is called here "Green Tops," in other places, "Scotch Downs," and in other localities, "White Rocks." They were brought to this neighbourhood from the County Mayo in 1850, and have done better since than any other variety used in this parish. From careful observation during the last two years I have discovered that the tubers are attached to roots, which extend a considerable distance on all sides, and consequently thinner planting, and less seed, answer better for this than for other varieties. By way of experiment, I had some sown in drills, and some in ridges. I found the ridges answered better, as the lateral expansion of the roots prevents the after-culture from being successfully performed. The produce per statute acre was 4 tons, 5 cwts. 1 qr. 16 lbs. All sound but 6 cwt., or nearly seven per cent.

I sowed 17 perches with winter vetches. This being the first crop of the kind remembered to have been sown in this neighbourhood, attracted much attention; and, anticipating that such would be the case, I was particularly careful in its culture. The produce, considering the quality of the soil, was

excellent. A few persons imitated my example, and others applied for instruction regarding it at a period of the season too late to recommend its cultivation. Succeeding this crop turnips were sown, which produced at the rate of 22 tons, 11 cwt. 3 qrs., per statute acre; and these two crops were raised in one year on part of a field which was called for many years before I got it, "The poor garden;" an evident proof of the benefits to be derived from the reclamation and judicious management of land.

I had 3A., 0R., 25P., under clover and perennial rye-grass. A portion of the produce was used green for house-feeding; the remainder was saved for hay; the produce of which was at the rate of 30 cwt. per statute acre.

On the reclaimed portion of the farm I had 4A. 3R. 25P. under oats; the produce was 7 barrels per statute acre, which was considered an admirable return in this poor locality.

The live stock kept on the farm for the past year were 2 cows, 1 calf, and 2 pigs. The cattle are house-fed throughout the year, and the turnips are given to them in a cooked state. The amount of dairy produce was £10.

The theory of agriculture is systematically taught in the School, and reduced to practice on the farm; and I am happy to inform you that the benefits derived by some parents from the practical knowledge of improved husbandry acquired by their children at the School have been gratefully acknowledged. Those benefits would be considerably extended if I could succeed in establishing an "Industrial Class;" but the attendance of boys at the School, who are able to work on the farm, is so inconstant and irregular, that the efforts hitherto made for the attainment of so desirable an object, have proved ineffectual; yet I will persevere, and I hope I shall succeed. Poverty has prevented a more general imitation of my example, with regard to *permanent improvements.* All who have noticed the improved appearance of the farm, and the crops growing on the reclaimed portion thereof, unhesitatingly admit the superiority of the new and improved system of farm management; but they say, "We are not able—we have not the means to do as you do." I say, in reply, "Begin on a small scale; improve a rood, or, even, half a rood at a time." But, then, again, they propose more serious objections, which are not so easily removed. It is not my province to describe those objections, or the means of their removal in this report; however, I may be permitted to observe, that while the causes on which they are grounded continue in operation, there are thousands on whom neither advice nor example will prevail, or induce them to undertake those agricultural improvements which constitute the principal element in their social amelioration. But some persons have taken my advice regarding gradual improvements, and promised to extend their operations, according to their circumstances. Turnips, mangels, small plots of clover, and a larger quantity than usual of cab-

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Cornafulla Model Farm.

bages, have been cultivated on the great majority of holdings in the neighbourhood of the school, and a vast improvement effected in the accumulation, management, and application of manure.

I enclose testimonials, relative to my improvements, from two resident proprietors in this parish. Similar testimony could be procured from other gentlemen of station and respectability, who, in passing through the farm, made very flattering observations on its management, but might appear egotistical.

I remain, Sir, your most obedient and very faithful servant,

FRANCIS DURNEY.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

Mount Florence, Athlone,
15th January, 1853.

SIR,—In answer to your letter, asking my opinion on the present state of your farm, I have to observe, that its progressive improvement to a casual observer is quite apparent, but to me, who knew the land for years, it is quite beyond my expectations; you have continued the improved system of husbandry which has been so successful under your management, much to my satisfaction as a resident proprietor, and, I hope, with profit to yourself. No person now seeing the land could believe it was the same worn out and exhausted farm it was when you got it; I only wish that my tenants, and those of my neighbours, would follow the excellent example you have set them; were they to do so, a rate of *5s. 3d.* in the pound would not now be levying off our division.

However, I have reason to hope your excellent system may be followed by some of our people, for those who were most distrustful now see and acknowledge that well applied industry is not the chimera they imagined; and, strange to say, those who laughed most loudly at the *new plans*, are the first to form the idea of imitating you.

Trusting you will go on and prosper,

I am, Sir, your obedient servant,

JOHN J. O'SULLEVAN.

Mr. F. Durney,
Cornafulla National School.

Johnstown, Thursday.

SIR,—For the last year I have been observing your system of farming, and have much pleasure in being able to state that your judicious management will, I am sure, greatly tend to enlighten the farmers in the neighbourhood, if they will but follow your *excellent* example.

Yours,

JOHN H. DILLON.

Mr. Francis Durney,
Cornafulla Agricultural School.

BALANCE SHEET for 1852.

Dr.

	£	s.	d.
To Amount of Valuation at commencement of year,	46	0	7½
,, paid Rent and Taxes, &c.,	6	2	7½
,, paid for Seeds, &c.,	1	19	9
,, ,, Cattle,	0	19	6
,, ,, New Farming Implements,	0	8	2
,, ,, Labour,	31	0	5
,, Gratuitous Labour of Pupils,	4	0	0
To Profit and Loss, for gain,	11	13	0
	£102	4	1

	£	s.	d.
By Amount received for Grain,	16	0	11
,, ,, ,, for Potatoes, Roots, &c., £1 16 9			
,, Value of do. used by Family, 6 3 6	8	0	3
,, Amount received for Cattle,	6	6	0
,, ,, ,, Dairy Produce, £3 2 6½			
,, Value of do. used by Family, 6 17 5½	10	0	0
,, Amount received for Eggs, &c., 0 5 9½			
,, Value of do. used by Family, 1 9 2½	1	15	0
,, Amount of Inventory and Valuation taken at close of the year, inclusive of proportion of unexhausted Improvements,	60	1	11
	£102	4	1

TABLE showing the CROPPING of the Cornafulla Ordinary Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.				tns.cwt.qrs. lbs.	£ s. d.	£ s. d.	
Potatoes,*	1 0 18	March and April,	All dug 13th Oct.,	9½ cwts.,	4 5 1 16	7 17 4	8 1 9*p.*	* All sound but 6cwt. 1q., or nearly 7 per cent. The variety is called here green tops, and in other localities Scotch downs. The quantity of seed per stat. acre is considerably less than that generally planted, as the tubers extended to a considerable distance on all sides.
Mangels,	0 0 16	24th April,	Used in Oct. & Nov.,	4½ lbs.,	10 13 3 0	4 5 0	2 0 0*p.*	
Swedes,	0 0 17	19th May,	23rd December,	3½ lbs.,	22 11 3 0	4 13 10½	6 12 0*p.*	
Aberdeens,†	1 0 3	June,	23rd December,	4 lbs.,	2 10 0 7	5 7 4	5 1 11*l.*	
Cabbages,	0 0 26	Various times, from 5th Feb. to 27th July,	Used as required,	Planted in rows 2 feet apart; plants 15 inches asunder,	Weight not taken, but a fair av. crop,	7 3 4½	4 12 7½*p*	† A failure; owing to the causes stated in my report.
Winter Vetches,‡	0 0 17	4th October, 1851,	Consumed green,	10 stn., ⅛ rye,	10 11 2 14 when in flower,	5 9 4	1 10 9*p.*	‡ A very good crop, and attracted much attention, being the first of the kind sown here.
Clover and Grass,	3 0 25	13th March,	Part used for soiling; hay from 5th to 10th July; ricked 29th July,	3 bushels perennial Rye-grass, 11 lbs. clover.	The calculation was made on hay which produced 30 cwt. per stat. acre, at £1 5*s.* per ton,	2 3 3	0 5 9*l.*	
Oats,§	5 2 27	March,	Aug. & Sept., put in haggard in Sept.,	11 stones,	7 barrels,	2 14 10	0 17 4½*p*	§ The produce of 3R. 1P. is not included in the calculations made on this crop, as it was a failure, owing to the causes stated in my report.
Total,	11 1 12							

(Signed,) FRANCIS DURNEY, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief.

WALTER HUSSEY WALSH, Manager.

8th January, 1853.

56. GEEVAGH ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Sligo.

Geevagh Model Farm.

January 5, 1853.

SIR,—Agreeably to your instructions, I beg leave to submit to you this my second Report, containing a brief account of the proceedings in connexion with the Agricultural department of this School, during the past year. As the principal advantages derivable from institutions of a similar character, are the example set forth of an improved system of farm management, and the excellent course of industrial education communicated to the minds of the rising youth, I have every reason to be satisfied with the influence, however limited, which this farm has been the means of exerting over both during the past year.

In proceeding to detail the working of the farm, it may be necessary to say, that the soil, being a clay loam on a gravelly subsoil, is naturally dry, and well adapted to the cultivation of the ordinary farm crops, such as turnips, mangel, oats, clover, carrots, parsnips, &c., and its position as a Model Farm is greatly enhanced by its being situated in the vicinity of a public thoroughfare, where its practical exposition of a useful and improved system cannot fail of attracting attention.

The rotation followed is the four-course, and I am led to adopt it from its suitability to the quality of the land, the quantity of straw it affords, and the consequent production of manure. The Farm Account-Book, Balance Sheet, and tabular returns, will show the monetary transactions and statistics of the Model Farm for the year, and will, I trust, be found satisfactory.

I am happy to be enabled to state, that the small farmers in the neighbourhood have already commenced to cultivate green crops, and collect their manure more assiduously than heretofore; and a marked change is hence perceptible in the quality and quantity of their grain crops, and the condition of their cattle. Although few have yet ventured upon the indispensable operation of draining, I have every reason to believe that, on the other hand, few deny its importance, and that many, under more favourable circumstances, will practice it as extensively and efficiently as their means will permit.

In conclusion, I would respectfully but earnestly suggest the establishment of a "Paid Industrial Class," from which many advantages to the School itself and to the system generally would be derived.

The text-book used in the instruction of the "Agricultural Class," is the "Agricultural Class-Book," sanctioned by the Board; and the interest which the pupils of this class continue to take in the study of it, and the proficiency they have attained in it, is highly satisfactory.

I remain, Sir, with much respect, your obedient servant,

THOMAS CLARKE.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

BALANCE SHEET of Farm Accounts for the Year ending 31st December, 1852.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To Amount of Valuation at commencement of Year,	12	14	8	By Amount received for Grain,	5	0	0
,, Estimated Rent and Taxes,*	3	8	0	,, for Potatoes and Roots,	2	0	0
,, Paid for Seed and Manure,	1	10	1	,, for Dairy Produce,	2	10	0
,, ,, Cattle,	1	1	0	,, for Eggs and Poultry,	0	15	0
,, ,, Implements and Repairs,	0	4	0	By Amount of Inventory and Valuation at close of Year,	14	13	6
,, ,, Labour,	1	10	9				
,, Gratuitous Labour of Pupils,	0	10	0				
Profit and Loss for Balance, being gain on the year,	4	8	0				
	£24	18	6		£24	18	6

* These are not paid by me, the proprietor, Mr. Keogh, giving the land rent free, and also paying the rates and taxes, and furnishing seeds gratuitously.

TABLE showing the CROPPING of the Geevagh Ordinary Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.							
Turnips,	0 0 31	21st May,	22nd November,	4 lbs.,	31 tons,	Not ascertd.	Not ascertd.	Seed supplied gratis by Mr. Keogh.
Mangels,	0 0 9	10th May,	20th October,	6 lbs.,	25 tons,	Not ascertd.	Not ascertd.	
Potatoes,	0 1 14	8th March,	August and Sept.,	10 cwts.,	Not ascertained,	Not ascertd.	Not ascertd.	
Oats,	1 0 0	18th March,	18th August,	10 stones,	10 barrels,	Not ascertd.	Not ascertd.	
Clover, &c.,	0 2 0	Spring, 1851,	—	—	—	—	—	Used as soiling for cow.
Kohl Rabbi,	—	—	—	—	—	—	—	About 2 drills, the produce of half an ounce sown for experiment. They grew well, and were much admired by the neighbouring farmers.

(Signed), THOMAS CLARKE, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief.

January 4, 1853. DOMINICK NOONE, P.P., Manager.

Appendix K.

II. Appendix to Dr. Kirkpatrick's Report.

57. Upper Arigna Ordinary Agricultural National School, County Sligo.

January 6, 1853.

Upper Arigna Model Farm.

Sir,—In compliance with your instructions, I respectfully beg leave to submit this, my second Report, on the proceedings in connexion with the agricultural department of the above School.

This farm contains 6a. 3r., Irish measure, whereof three statute acres are under cropping, the remaining portion of the farm being yet unreclaimed. It is divided into five parts, upon which a five-course rotation is followed, viz. :—two-fifths in green crops, two-fifths in grain crops, and one-fifth in clover and grasses.

It will appear from last Report, that the cultivated part of this farm has not extended beyond the limits then given, but when the disadvantages and inconveniences of procuring materials for reclamation are taken into consideration, it may in some degree, account for want of progress in this respect. It is situated between two ranges of bleak mountains, with an aspect sloping considerably towards the north, with hardly any practicable road contiguous, whereby lime or other materials for reclamation could be conveyed, there being none in the immediate vicinity.

The soil consists in part of deep peat, resting on a subsoil of clay-slate, and being naturally in a wild, coarse state, the decomposing powers of lime are indispensable. I procured some quick-lime which I applied in its caustic state, to part of this unreclaimed land in autumn last, and from which, with the assistance of some manure, I hope to get (this season) a fair crop of potatoes.

Such a system of cropping as this, may at first appear contrary to the rules of good farming, but my experience of the results makes me favourable to it. Before bringing the subject of reclamation to a close, I may be permitted to say a few words on the mode of culture I intend to adopt with respect to the land I have recently limed.

It is that denominated "lazy bed," more commonly called ridges. The width of each ridge shall be 4 feet, the manure to be spread on the grassy surface; a sod raised at each side of the manure, of such a breadth as to meet when turned, completely covering the manure, the sods should be as thin as they can possibly admit of being turned without breaking, (practice will render this easy); a small quantity of mould from the furrows laid on the brinks, and where the sods meet, finishes the operation.

The potato sets should then be dropped in holes formed by a pointed stick, about $3\frac{1}{2}$ feet long, with a supporter to rest the foot on when pressing it through the sods; the sets should lie, if possible, on the manured or grassy surface; the holes

thus formed, will greatly facilitate the buds in coming to the surface. To those in possession of unreclaimed peaty soils, I venture to recommend this mode of culture for the potato :—first, as potatoes so cultivated are wholly free from disease or blight; secondly, the narrow ridges and wide furrows afford an opportunity for subsoiling and trenching; thirdly, the narrow ridges in moist lands are found to produce better crops, and lastly, it brings the land sooner to a finer tilth to produce other crops.

I do not wish to close this report without saying a little on the cultivation of flax. I had a small patch of land sown with flax last year, and the produce has far surpassed my expectations, so much so, that many of the neighbouring farmers, knowing the quality of the land upon which it was grown, the period of sowing, and the ordinary treatment it received in its cultivation, are fully determined to give this plant a place amongst their cultivated crops. I am sorry to have to state that I did not preserve the "bolls," having no mode of rippling available. I hope against the next season to be able to set a better example in this department of farming. The great demand for manure consequent on the cultivation of green crops being such, that what was hitherto looked upon as useless, is now carefully collected and considered as reproductive.

From the information which the children have gathered at school, in very few instances can a trace of the liquid-manures of their cattle houses, be seen running waste as of old. I am sorry that the system of house-feeding is not as forward as I would wish, but the facility afforded by the unreclaimed mountains for the rearing of young cattle, may, in a great measure, account for it.

I have 12 boys in the "Agricultural Class," who receive instruction daily in the theory of agriculture; but from being disappointed in their expectation of receiving a remuneration from the Commissioners for their services, are unwilling to work on the farm.

Appended will be found the "Balance Sheet" of the farm for the year. Hoping the foregoing may prove satisfactory,

I have the honour to be, Sir, your obedient servant,

MICHAEL GRADY, Teacher.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

[BALANCE SHEET.

UMMARY of the Year and BALANCE SHEET.

Dr.

	£	s.	d.
To Amount Valuation commencement of the year,	15	5	0
,, in Rent and Taxes,	4	9	6
,, in Seeds, Lime, and Manure,	2	1	11½
,, for Cattle during year,	9	2	9
,, for Farming Implements and Repairs,	0	1	4
,, for Labour,	3	1	8
,, Gratuitous Labour of Pupils,	0	10	0
,, Profit for the year,	1	16	0½
	£36	8	3

Cr.

	£	s.	d.
By Amount received for Grain,	4	1	6
,, Potatoes and Roots,	4	5	0
,, Cattle sold,	6	4	3
,, Dairy produce,	3	7	6
,, Poultry and Eggs,	1	1	6
By Amount of Inventory and Valuation taken at close of year, inclusive of proportion of unexhausted improvements,	17	8	6
	£36	8	3

P.S.—The Profit on the year's transactions will appear small compared with the Expenditure, but I have taken no account of anything but what is at present on the farm.

MICHAEL GRADY.

TABLE showing the CROPPING of the Upper Arigna Ordinary Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Turnips,	0 2 16	May and June,	November,	From 5 to 6 lbs.,	From 15 to 18 tons,	4 10 0	5 0 0	In speaking of the potato, I beg to recommend the cultivation of a species named "White Rock," on account of its excellence in quantity and quality.
Potatoes,	0 2 16	March,	October,	12 cwt, of 8 sts. each,	12 bar. of 10 cwt. each,	5 10 0	6 10 0	
Cabbages,	0 0 12	April,	November,	10,080 plts.,	From 12 to 14 tons,	7 0 0	3 0 0	
Oats,	1 0 16	March,	September,	12 to 14sts.,	From 5 to 6 sacks of 24 stone each,	2 10 0	3 10 0	
Flax,	0 0 8	May,	August,	From 4 to 5 bushels,	28 stones,	5 0 0	10 10 0	I have had a small patch sown with flax this season, in order to ascertain if the soil were adapted for the growth of such a plant. I am happy to be able to say, that under ordinary treatment, it has far surpassed my expectation. I hope there will be many found to give its cultivation a trial again the next season in this locality.
Clover and Grasses,	0 2 12	March,	August,	14lb. of clover and 4 bushels [illegible]	If in hay 6 tons; cannot say how much if used in soiling,	2 10 0	7 0 0	

(Signed), MICHAEL GRADY, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief.

January 16, 1853. DOMINICK NOONE, P.P., Manager.

Appendix K.

II. Appendix to Dr. Kirkpatrick'sReport.

Killenagh Model Farm.

58. Killenagh Ordinary Agricultural National School, County Roscommon.

January, 1853.

Sir,—In compliance with the directions received from the Education Office, I beg leave to submit to you the following report of the progress of the Agricultural department of the above School.

The farm contains 9a. 1r. 10p. statute, about one-third of which is a shallow clay loam, resting on a stiff retentive clay subsoil; and the remainder is a peaty soil, varying from three to six feet in depth, resting on a substratum of marl.

When I got possession of it, on the 3rd of April last, it was in a miserably exhausted condition;—overstocked with weeds that had been allowed to grow unmolested, and deposit their seeds for several years; the boundary trenches filled up with weeds and diluvial deposits, in consequence of which a great part of the farm was flooded during the winter months, and no attempt had been made to let the stagnant waters pass away, until they were carried off in the months of March and April by evaporation, thus producing the chilling effects so injurious to vegetation.

The cow-house and the dwelling-house, part of which did not come into my immediate possession until the 11th of November last, were both in a wrecked and wretched condition.

With all these obstacles, I did not expect any pecuniary profits to accrue from this year's proceedings. However, with an extraordinary outlay on labour, the results have turned out most satisfactory, as will appear from the statistical Return, Inventory, and Balance Sheet, which accompany this Report.

The "Agricultural Class," consisting of 27 boys, two of whom are boarders, receive agricultural instruction for half an hour each day, during five days of the week; and also practical agricultural instruction on the farm for one hour each day when the weather permits.

In general, they are anxious to become acquainted with the improved system of farming; and if some small recompense were given to a few of the most willing and industrious, it would be an inducement to others to take part in the farm operations, and would certainly prove of great utility in promoting the interests of this establishment.

The assistance of the boarders, not only in many of the farm operations, but also in the various duties connected with the School, is of great advantage.

In conclusion, I beg leave to return my most sincere thanks and gratitude to the Manager (Rev. William Hughes, P.P., Elphin), the Patron, Christopher French, Esq., Clooniquin; and Patrick P. Taaffe, Esq., Foxboro', for their liberal assistnce, and kind co-operation.

I am, Sir, respectfully, your obedient servant,

Michael Owens.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

Balance Sheet of Farm Accounts for Year ended 31st December, 1852.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To Amount paid in Rent and Taxes,	3	19	7½	By Amount received for Hay,	6	6	0
,, paid for Seeds, Lime, and Manures,	1	13	7	,, Dairy produce,	1	1	2
,, paid for Cattle,	8	0	0	,, Potatoes, &c., used in house,	5	0	0
,, paid for Labour,	32	7	11	,, Dairy produce used in house,	2	10	10
,, of Gratuitous Labour of pupils,	0	5	5	,, Valuation and Inventory at close of the year, inclusive of proportion of unexhausted improvements,	39	18	10
,, Profit and Loss for balance, being gain on the year,	8	10	3½				
	£54	16	10		£54	16	10

We were supplied with the use of all the farming implements that were required for this year's operations by the Patron, Christopher French, Esq., viz.: two box-barrows, a hand-barrow, two spades, a hoe, a garden-rake, a crowbar, a pick-axe, a sledge, draining implements, &c., &c.

TABLE showing the CROPPING of the Killenagh Ordinary Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied. A. R. P.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c. £ s. d.	Profit or Loss per Statute Acre on the Culture. £ s. d.	Observations.
Potatoes,	1 0 34	1st week in April,	From Aug. to Nov.,	8 cwt.,	6 tons,	8 10 5	6 9 7p.	About one-fourth part injured by blight.
Turnips,	0 1 24	25th May,	End of November,	4 lbs.,	20 tons,	8 0 0	2 0 0p.	The extent for the turnips was increased by one rood during the month of August, as a stolen crop after early potatoes, which returned about 4 tons, or 16 tons per statute acre.
Cabbages, of sorts,	0 0 16	3rd week in April,	From July to the end of November,	—	Crop very good, but weight not taken,	6 0 0	5 0 0p.	
Red Beet-root,	0 0 6	1st May,	November,	4 lbs.,	Weight not ascertained, but crop very good,	8 0 0	4 0 0p.	About eight plants in this extent ran to seed.
Parsnips,	0 0 1	Middle of April,	End of October,	7 lbs.,	10 tons,	8 0 0	2 0 0p.	
Carrots,	0 0 1	2nd week in April,	End of October,	6 lbs.,	18 tons,	8 0 0	4 0 0p.	
Onions,	0 0 1	2nd week in April,	Beginning of Oct.,	5 lbs.,	Crop very good, weight not ascertained,	8 0 0	5 0 0p.	
Lettuces,	0 0 3	Successions, from Ap. to July,	From July to Sept.,	—	Very good,	7 0 0	4 0 0p.	The brown Dutch, Magnum Bonum, and white Cos. The white Cos was the most palatable.
Peas,	0 0 3	Successions, from Ap. to July,	From Aug. to Nov.	Seed put down 2½in. asunder,	Not ascertained,	6 0 0	4 0 0p.	During the months of May and June successions of peas were sown between the rows of early York cabbages, and when the cabbages were removed in July and August, the peas proved to be a very good crop.
Beans,	0 0 2	Middle of May,	Sept. and October,	16 stones,	Not ascertained,	5 0 0	1 10 0p.	
Leeks,	0 0 1	Middle of May,	—	—	Not ascertained,	3 0 0	—	
Rape seed,	0 0 2	July,	Transplanted in Sept.,	—	—	4 0 0	—	Transplanted where potatoes had been as a stolen crop. They afforded a good deal of green feeding for cows.
Grass,	5 2 10	Part grass 1st yr., Part grass 2ndyr.	31st July,	—	1tn. 16cwt., 16cwt.,	1 12 0	0 7 0p.	I have valued the after-grass to be equal to 16 cwt. of hay per statute acre.
Potatoes,*	1 0 8	End of March,	August,	—	—	—	—	Consumed by my predecessor.
Young trees, and boys' play-ground,	0 3 18	—	—	—	—	—	—	The rent of this is always deducted by the landlord, Christopher French, Esq., who has given it gratis as a pleasure-ground to the boys.
	9 1 10							

* These potatoes were planted by my predecessor before I got possession of the farm, and according to agreement he was to have them at the landlord's rent, viz., 18*s.* 6*d.* per statute acre.

(Signed), MICHAEL OWENS, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

29th January, 1853. WILLIAM HUGHES, P.P., Manager.

59. REPORT on the LOUGHGLYNN SCHOOL GARDENS for 1852.

SIR,—I beg to state, that for the year 1852 a steady progress has been made, not so much in increasing the number of gardens, as in improving those already in progress; and there is a decided advance both in the general management and in the course of cropping pursued, and in the plan of increasing the plots, arising from the increased pecuniary profits made by the boys on their crops for the last year.

Much more is expected to be done this year; and I hope to be able, when called on, to forward a satisfactory report of our progress.

The crops generally grown are the ordinary garden vegetables, the seeds of which are given to the boys at half price, for the reasons stated in the Report for 1850; and it is found that much good has emanated from the change made, as the cultivation and keeping of the crops have been much more carefully attended to than when seeds had been given quite gratis.

While I say so much for the boys, I cannot here avoid alluding to the girls, who have paid the strictest attention to the cultivation of their flowers, and who have kept their little gardens in the neatest order; and, as I shall immediately show, have reflected on themselves credit at their little flower show, in August last.

The flower show was held in August, and the number of exhibitors amounted to thirty-seven, from the age of six or seven to fifteen and upwards. A great many respectable visiters were present at the show, and all were highly delighted at the variety and excellence of the produce exhibited. The judges, after examining the nosegays, awarded the premiums according to merit.

The vegetable show was held on the 14th of October, and I must say that it was very creditable indeed. When the different parcels were arranged on a platform erected for the purpose, the judges appeared, with many other respectable persons, all of whom were highly delighted with the pleasing spectacle before them, and concluded that great good must certainly result from such industrial emulation.

Some of the boys have made from £2 to £5 of their vegetables during the year, together with supplying domestic wants. The area of the largest garden does not exceed thirty perches.

An Agricultural Class has been formed in the school, who are instructed twice a-week, some of whom seem to have a good idea of the subject.

Hoping you may find this Report satisfactory,

I remain, faithfully yours,

CHARLES STRICKLAND.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

Appendix K.

II. Appendix to Dr. Kirkpatrick'sReport.

4.—Workhouse Agricultural School Reports.

60. Ballymoney Workhouse Agricultural School and Farm.

Ballymoney Union Workhouse Farm.

Sir,—The contents of the farm under cultivation, in connexion with the Ballymoney Workhouse, for the year 1852, were 13a. 0r. 13p., statute measure, the greater part of which is a heavy clay, resting on a clay subsoil.

Generally speaking, the crop was an average one, with the exception of the potato, which was fully one-third deficient. It will be observed in the "Balance Sheet" that £1 12*s.* 6*d.* for repairs, &c., is added to the seed account. Also, that inasmuch as nothing was paid for labour, I have appropriated the labour column to feeding stuffs purchased.

The principal rotation followed on this farm is as follows:—1st year—potatoes, with second crop of rape; 2nd year—turnips or mangels; 3rd year—wheat or oats; 4th year—Italian rye-grass. The reason I do not grow more grain crops is in consequence of the limited extent of the farm, and my object being to cultivate such crops as will produce the largest amount of profit at the least possible cost; at the same time taking care that the land shall not be injured by a succession of the same kind of crops.

I am happy to say that for years there has not been an able-bodied male pauper in this house, so the farm is principally cultivated by the boys, before and after school-hours; and particular attention is directed to their instruction in both the theoretical and practical details of agriculture, and to the inculcation of habits of industry and economy, which I consider even of more importance than the amount of profits derived from the farm, inasmuch as I find they are eagerly sought after by the neighbouring farmers as farm-servants, and are generally much liked, and well reported of by their masters. In conclusion, I beg to express my thanks to your Board for the handsome recognition of my efforts which it has awarded me; and I hope by continued and increasing exertions to advance the farm in connexion with the Ballymoney Workhouse still further in agricultural improvements, and to make it such as will afford greater facilities for the industrial training of the boys, to which, I am convinced, too much attention cannot be given.

I am, Sir, your obedient servant,

Robert Bogle, Master.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

[Balance Sheet.

BALANCE SHEET of Ballymoney Workhouse Farm Account for Year ended 31st December, 1852.

Dr.

	£	s.	d.
To Amount of Valuation at commencement of year,	65	17	0
,, paid in Rent and Taxes,	34	17	0
,, ,, Seeds, Lime, and Manures,	16	17	11
,, ,, Cattle during the year,	20	0	0
,, ,, Implements and Repairs,	2	16	8
,, ,, Feeding stuff for Cows and Pigs,	30	17	2
To Profit and Loss, being Balance in favour of Union,	124	4	9
	£295	10	6

Cr.

	£	s.	d.
By Amount received for Grain,	8	16	0
,, ,, for Potatoes and Roots,	60	6	4
,, ,, Cattle sold,	24	14	1
,, ,, for Dairy Produce,	47	18	4
By Amount of Inventory and Valuation taken at close of the Year,*	153	15	9
	£295	10	6

* In the above Valuation, as compared with that at the commencement of the year, there is an increase of £41 10*s.* for Pigs bred in the establishment, and £45 4*s.* 2*d.* for farm produce on hands.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Ballymoney Union Workhouse Farm.

TABLE showing the CROPPING of the Ballymoney Workhouse National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Potatoes,	2 2 37	February,	August to November,	11 cwt.,	4 tons,	8 10 7	1 0 0	
Turnips,	1 3 0	May and June,	December,	4 lbs.,	24 tons,	6 10 0	8 10 0	
Mangels,	1 2 0	1st May,	26th November,	5 lbs.,	29 tons,	7 10 0	16 13 4	
Carrots,	0 1 20	24th March,	1st December,	6 lbs.,	12 tons,	7 10 0	10 10 0	
Cabbages,	0 3 20	March,	December,	4,840 plants,	28 tons,	7 12 6	8 14 2	
Onions,	0 3 0	30th March,	1st September,	10 lbs.,	6 tons,	9 10 0	22 0 0	
Oats,	1 2 26	26th March,	1st September,	8 stones,	204 stones,	4 13 0	5 7 0	
Vetches,	1 1 0	March and April,	July,	2¾ bushels,	13 tons,	4 6 0	2 4 0	
Grass,	2 0 30	April,	June,	1¾ bushels / 10 lbs. clvr.	cut 3 times,	3 15 0	2 15 0	
Mangels,	—	July,	November,	plants,	17 tons,	5 15 4	8 7 6	Transplanted on a portion of the ground after Vetches.
	13 0 13							

(Signed), JOHN STEWART, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief.

4th January, 1853.

ROBERT BOGLE, Workhouse Master and Agriculturist.

61. BALLYCASTLE WORKHOUSE AGRICULTURAL NATIONAL SCHOOL, County Antrim.

BALANCE SHEET of Farm Accounts for the Year 1852.

Dr.	£	s.	d.
To amount Valuation, at commencement of year, .	143	1	0
,, paid for Rent and Taxes, . . .	7	8	11
,, ,, Seeds, Lime, and Manures, .	11	16	1
,, ,, Cattle during the year, . .	12	18	6
,, ,, Implements and Repairs, . .	0	8	5
,, ,, Feeding stuffs for Cattle and Pigs,	2	14	1
,, Profit and Loss, being balance in favour of Union, ...	72	11	6
	£253	4	6

Cr.	£	s.	d.
By Amount received for Grain, . . .	10	10	2
,, Potatoes and Roots, .	3	19	6
,, Cattle sold, . . .	34	3	1
,, Dairy produce, . . .	59	7	1
,, Inventory and Valuation at close of the year,	145	4	8
	£253	4	6

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Ballycastle Union Workhouse Farm.

TABLE showing the CROPPING of the Ballycastle Workhouse National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Wheat,	1 1 21	February,	September,	12 stones,	20 cwts.,	2 14 1	8 7 1	This being Spring wheat, and the seed time unfavourable, it did not prove a good crop.
Oats,	1 2 0	March,	August,	10 stones	30 cwts.,	—	—	
Carrots,	0 0 15	April,	December,	4½ lbs.,	13 tons,	—	—	
Mangels,	1 0 20	May,	December,	3⅔ lbs.,	40 tons,	—	—	
Turnips,	1 2 20	May,	December & January,	3 lbs.,	40 tons,	—	—	
Cabbages,	0 2 0	From Feb. to June,	All seasons of year,	5,500 plants,	32 tons,	—	—	
Barley,	0 1 15	May,	August,	10 stones,	320 stones,	—	—	

(Signed), ALEXANDER M'ALLISTER, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

10th January, 1853.

GEORGE BUTLER, Master and Agriculturist.

62. Larne Workhouse Agricultural School, County Antrim.

January, 1852.

Larne Union Workhouse Farm.

Sir,—In obedience to your instructions, I beg to submit to you a Report on the Agricultural Department of the Larne Workhouse National School for the past year.

About sixty boys attend school daily from ten till one o'clock, where they are instructed in the elementary branches usually taught in National Schools. About twenty-four of these young lads receive agricultural instruction on Tuesdays, Wednesdays, and Fridays, from seven o'clock till eight, A.M., so that there is no infringement whatever on the regular school hours. It is to be regretted that a larger number is not qualified to profit by studying agricultural subjects; the inability of those who cannot participate in this kind of instruction is attributable to the deplorable state of ignorance in which they are found at the period of admission, coupled with the comparatively short time they remain, owing to the increasing demand for boys of this establishment; generally speaking, therefore, it is those who remain here for a considerable time that can avail themselves fully of the benefits this institution is capable of conferring.

The pupils appear sensible of the advantages of mental and industrial training, as is manifest from the desire exhibited, on their part, of acquiring a knowledge of the principles on which correct agricultural practice is founded, and the readiness with which they engage in the performance of the various operations to be executed on the farm; and judging from the information they have acquired, in both a literary and an agricultural point of view, and the strict attention paid to their moral conduct, it is confidently anticipated that they will become useful members of society in after life.

The portion of the Workhouse Farm appropriated for the training of the Workhouse boys, contains 3A. 12P., statute, 2A. 3R. 30P. of which is in cultivation, the remainder being necessarily occupied by the manure heap, walks, &c.

Cropping—Potatoes, Beans, and Cabbages.—The potatoes were planted in ridges, 5 feet wide; the seed was deposited on the manure, which was sparingly applied, in rows 18 inches apart. On a few of the ridges beans were planted, occupying every alternate row with the potatoes; the whole was then covered from the alleys in the usual way.

The kinds of potatoes cultivated were Kemps, Cruffles, and American Dandies; the produce of sound ones was 41 cwt.; the kind of beans cultivated was Mazagan.

Cabbage plants were dibbled in the sides of the ridges, but the weight of produce was not ascertained.

Onions.—After the ground for the onions was reduced to a proper state of pulverization, by repeated diggings, it was very liberally supplied with compost formed from the contents of the cesspools, &c.; it was then lightly dug, so as to retain

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Larne Union Workhouse Farm.

the fine mould on the surface for the reception of the seed; it was afterwards laid off in beds four feet wide, and the sowing finished before the end of the first week in April.

The quantity of seed sown (Strasbourg) was $5\frac{3}{4}$ lbs.; the weighed produce was 88 cwt.

Carrots and Parsnips.—The ground for these crops was dug in autumn; and as soon, in spring, as the land was sufficiently dry for the purpose, I had manure distributed evenly over the surface, and dug deeply into the ground. When the sowing season arrived, the ground was repeatedly dug till it acquired the proper tilth, then the seed was sown, and the work finished by consolidating the tops of the drills.

The kinds of carrot-seed sown were Altringham and Scarlet Surrey; the weighed produce was 5 tons 13 cwt.

The weighed produce of parsnips was 2 tons.

Mangel Wurzels.—The preparation of the ground for both mangels and turnips was, in every respect, similar to that of the carrots and parsnips, except that the drills were opened at wider intervals, the manure applied after their formation, and in much greater quantity to the mangels than to the turnips.

The mangel seed—Long Red—was sown the last week in April, in dibble holes, twelve inches apart; the weighed produce of roots was 6 tons 16 cwt.

Turnips.—The turnip seed was sown, at different times, between the middle of May and the end of the first week in June; and in order to test the relative merits of the different varieties of Swedes, the following kinds were cultivated, viz., "Skirving's Improved," "Laing's," "Dunmurray," "Green," and "Purple-topped."

The estimated statute acreable produce of bulbs was 30 tons, 29 tons 16 cwt., 28 tons 16 cwt., 27 tons, and 26 tons 17 cwt., respectively. It would appear from this that the Skirving variety succeeds best.

The produce of our little farm may, I think, be considered a fair average; but there is no doubt that by the application of an abundant supply of stimulating manure, which could have been procured, much greater returns would have been obtained; as it was, however, the carrots and onions proved excellent crops, and their appearance during the summer would have delighted the most fastidious agriculturist.

In conclusion, I may be permitted to state, that a large quantity of food for cattle, &c., might be produced by the introduction of intermediate or stolen crops, without injuriously interfering with the regular routine of cropping; but in the absence of stock this course has not been attempted, except in the case of cabbage plants, which met a very ready sale last spring.

I am, Sir, your very obedient servant,

JOHN WHITE,
Schoolmaster and Agriculturist.

Thomas Kirkpatrick, Esq., M.D.,
Inspector of National Agricultural Schools.

Balance Sheet of the Larne Workhouse Agricultural School Farm for 1852.

Dr. *Cr.*

Expenditure.	£	s.	d.	£	s.	d.
To value of Stock, &c., at 1st January, 1852:—						
,, Farming Implements,	3	10	0			
,, Unexhausted Improvements,	2	0	0			
,, Manure,	2	10	0			
				8	0	0
To amount paid in Rent and Taxes,				10	13	6
,, Seed Potatoes,				1	8	0
,, Beans,				0	1	9
,, Onion Seed,				0	7	8
,, Parsnip Seed,				0	2	0
,, Carrot Seed,				0	6	0
,, Cabbage Seed,				0	0	4
,, Mangel Wurzel Seed,				0	0	9
,, Turnip Seed,				0	2	6½
,, New Farming Implements,				1	18	6
,, Labour,				0	17	6
To Profit and Loss for Balance, gain on the year,				54	12	1½
				£78	10	8

Receipts.	£	s.	d.	£	s.	d.
By amount of Inventory and Valuation taken on 31st December, 1852, being the whole of the Farm produce for the year on hands at that date:—						
,, Onions, 88 cwt., at 4*s.* 10½*d.* per cwt.,	21	9	0			
,, Potatoes, 41 cwt., at 3*s.* per cwt.,	6	3	0			
,, Beans, 28 lbs., at 2*d.* per lb.,	0	4	8			
,, Carrots, 5 tons 13 cwt., at 1*s.* 6*d.* per cwt.,	8	9	6			
,, Parsnips, 2 tons, at £1 per ton,	2	0	0			
,, Mangel Wurzels, 6 tons 16 cwt., at £1 per ton,	6	16	0			
,, Turnips, 30 tons, at 15*s.* per ton,	22	10	0			
,, Cabbages,	1	0	0			
				68	12	2
,, Farming Implements,	5	8	6			
,, Unexhausted Improvements,	2	10	0			
,, Manure,	2	0	0			
				9	18	6
				£78	10	8

TABLE showing the CROPPING of the Larne Workhouse Agricultural National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.				tons,cwt.qrs.lbs.	£ s. d.	£ s. d.	
Potatoes, Beans, and Cabbages,	0 2 24	March,	September,	10 cwt.,	63 cwt.,	16 3 0	4 16 0*l.*	The potatoes were attacked by blight at an early season, and about one-half of them was worthless; the beans were merely tried as an experiment.
Onions,	0 1 16	March and April,	Sept. and October,	16$\frac{3}{7}$ lbs.,	12 11 1 20	18 17 6	42 6 7*p.*	
Carrots,	0 1 24	April,	October,	15 lbs.,	14 2 2 0	16 10 0	4 13 9*p.*	The carrot seed had germinated before it was committed to the ground, which was attended with very satisfactory results.
Parsnips,	0 0 38	April,	November,	8$\frac{1}{2}$ lb.,.	8 8 1 0	13 15 9	5 7 6*l.*	The apparent loss, arising from the cultivation of the parsnips, is attributable to the low scale of valuation, and by no means to an inferiority of the crop; for, in my opinion, it was a good one, and it called forth the approbation of many visiters.
Mangels,	0 1 4	April,	November,	5$\frac{1}{2}$ lbs.,	24 14 2 0	16 14 6	8 0 0*p.*	
Turnips,	1 0 4	May,	December,	4$\frac{3}{4}$ lbs.,	30 0 0 0	15 7 4	7 2 8*p.*	

(Signed),

JOHN WHITE, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief.

J. W. M'CORMICK, Manager.

January 7, 1853.

63. BANBRIDGE WORKHOUSE AGRICULTURAL SCHOOL, County Down.

BALANCE SHEET of Farm Accounts for Year ended 31st December, 1852.

Dr.

	£	s.	d.
To Amount of Valuation at commencement of year, .	8	6	8
,, paid in Rent and Taxes, ...	13	12	4
,, paid for Seeds, Lime, and Manures, . .	5	7	1½
,, paid for Labour, ...	8	8	0
To Profit and Loss for gain, being balance in favour of Union, ...	49	11	8½
	£85	5	10

Cr.

	£	s.	d.
By Amount received for Potatoes, Roots, &c., . .	46	5	1
,, Inventory and Valuation at close of the year,	39	0	9
	£85	5	10

TABLE showing the CROPPING of the Banbridge Workhouse National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.				cwt. qrs. lbs.	£ s. d.	£ s. d.	
Potatoes,	3 1 13	Feb., Mar., April,	—	8 cwt.,	35 2 24	6 18 9	3 3 4*l.*	Blighted.
					tons.cwt.qrs.lbs.			
Turnips,	0 3 16	June,	—	3½ lbs.,	14 2 1 12	6 7 0	5 8 3½*p*	
Mangels,	1 3 6	May,	November,	3½ lbs.,	14 10 3 17	6 7 0	8 3 11*p*.	
Onions,	0 3 30	March,	September,	4½ lbs.,	3 9 1 9	6 7 0	14 9 0*p*.	
Leeks,	0 0 10	April,	—	4 lbs.,	£16 0*s*. 0*d*.	6 7 0	9 13 0*p*.	
Cabbages,	0 2 29	Feb. & forwards,	—	—	£9 6*s*. 10*d*.	6 7 0	2 19 10*p*.	
					cwt. qrs. lbs.			
Carrots,	0 1 36	March,	November,	5 lbs.,	68 3 19	6 7 0	0 17 0*l*.	Seed not good.
Beans,	0 0 27	February,	September,	1½ cwt.,	24 0 0	6 9 0	1 1 0*p*.	

(Signed), JOHN JOHNSTON, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief.

23rd December, 1852.

JOSEPH DICKSON, Manager.

64. NEWTOWNARDS WORKHOUSE AGRICULTURAL NATIONAL SCHOOL, County Down.

January, 1853.

Newtownards Union Workhouse Farm.

SIR,—I beg to submit the following statement, regarding the management of the Newtownards Workhouse Agricultural National School for the past year.

On application to the Board of Guardians, a portion of the Workhouse ground containing an acre and a half, was allotted as a Model Farm, to be cultivated exclusively by the schoolboys; suitable farming implements being allowed. As a first experiment, an acre only was cultivated; the crops grown were potatoes, turnips, mangels, parsnips, and oats. The ground was dug and manured, drills or ridges formed, seeds covered, the crops kept clear of weeds, &c., and harvested by the boys. The value of the labour of the pupils was not estimated, from the difficulty of so doing.

All who could work were engaged at whatever they could do best, the strong at the heavier, and the weak at the lighter kinds of labour. Mr. Brogan, Sub-Inspector of Agricultural National Schools, in the observations recorded by him on the occasion of his visit in October last, thus speaks of the manner in which the operations were performed: "The cultivation has been fairly carried out by the boys, I believe equally as well as the adult paupers could have done." The quantity of land being so small, and the manure and seeds being supplied by the master, who superintends the labour of the rest of the farm, I kept no regular account of the expense of cultivation, or of the value of the produce, as the greater part was consumed in the house, and valued along with the crops grown on the other part of the farm.

The smartest and most advanced boys are taught shoemaking and tailoring; those employed at the shoemaking business never labour on the farm, as they are constantly learning their trade, except a few hours each day in school, receiving literary instruction; but those learning the tailoring business, are only engaged half time at this trade, the other half being spent partly in the school, and partly on the farm. Those not at trades work on the farm at whatever they are able; but they are so small—there being, out of sixty at present attending school, only five or six fit to dig—that little labour can be carried on. When a year or two at a trade, they are apprenticed out, and those not at trades, but having any quickness, are easily hired—there were thirty apprenticed or hired out last year—so that a due proficiency cannot be made in the theory of agriculture, during the short time they continue in the house. The opportunities for hiring and apprenticing boys possessing any cleverness, are so frequent, and as a situation in the service of a respectable farmer or tradesman, is considered preferable to remaining here, there are so few of any size and intelligence left, that a sufficient

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Newtounards Union Workhouse Farm.

number cannot be had at present, to be taught even the rudiments of a trade in the house.

The majority being very young, and little advanced in learning, and the progress in *literary* and *religious* knowledge being most inquired into, most time and attention are necessarily devoted to their improvement in these branches, so that the time for agricultural instruction is too limited.

The advantage and importance of training our pauper youth to habits of industry and self-reliance, are acknowledged by all; and what can be more effectual for such purpose, than having them engaged a few hours each day, at cheerful and healthy employment on a well-managed farm?

I will keep them employed on whatever portion of land they are capable of cultivating during the coming season, as they are never so happy as when labouring in the fields, gaining knowledge and health in the exercise.

I have the honour to be, Sir, your most obedient servant,

JOHN RITCHIE, Schoolmaster.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

65. Coleraine Workhouse Agricultural National School, County Londonderry.

Balance Sheet of Farm Accounts for Year ending 25th March, 1853.

Dr.	£	*s.*	*d.*	*Cr.*	£	*s.*	*d.*
To Pigs on hands,	9	0	0	By 668 stones Onions sold,	28	11	4
,, Rent,	25	13	2	,, 698½ stones Oats sold,	27	5	10
,, Poor Rates,	0	13	7	,, 398 stones Barley sold,	16	12	5
,, 64 stones seed Oats,	2	14	8	,, Vegetables sold,	9	3	10
,, 16½ stones seed Barley,	0	16	6	,, Cabbage plants sold,	4	6	0
,, Seed Potatoes,	3	2	2	,, Pigs and Pork sold,	44	10	10
,, Garden seeds,	1	12	6	,, 1,372 stones Potatoes used in house, at 3*d.* per stone,	17	3	10
,, Pigs bought,	3	12	6	,, Vegetables used in house,*	27	14	0
,, Cabbage seeds,	0	6	0	,, Cabbage plants planted for next year's crop,	2	0	0
,, Bran, Bean-meal, &c.,	4	6	9	, 14 tons Straw,	14	0	0
,, Horse work,	1	13	0	,, Vegetables on hands,	3	10	0
Balance in favour of Union,	147	7	3	,, Pigs on hands,	6	0	0
	200	18	1		200	18	1

* Soup is given to the inmates *each* day in the week.

TABLE showing the CROPPING of the Coleraine Workhouse National School Farm for 1852.

Crops Cultivated.	Extent Occupied. A. R. P.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
Oats,	5 0 0	March,	August,	10 stones,	648 stones,	Not known,	Not estimated,	
Barley,	2 0 0	March,	August,	8½ stones,	199 stones,			
Potatoes,	1 1 0	March,	August and Sept.,	178 stones,	1093 stones,			
Carrots,	0 2 0	1st April,	October,	Not known,	—			Bad crop; seed sown three times.
Turnips,	0 2 0	12th May,	—	Not known,	—			Bad crop; seed sown twice.
Mangels,	0 2 0	April,	November,	10 lbs.,	—			Good crop; all used in house.
Leeks,	0 2 0	March,	—	8 lbs.,	—			
Onions,	0 3 0	March,	October,	8 lbs.,	891 stones,			
Cabbages and plants,	1 0 0	August,	—	—	—			

(Signed), WILLIAM MELLON, Master.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

21st April, 1853. JOHN V. FLEMING, Correspondent.

66. CLONES WORKHOUSE AGRICULTURAL NATIONAL SCHOOL, County Monaghan.

10th January, 1853.

Clones Union Workhouse Farm.

SIR,—Since my last annual Report—this time twelvemonth—you are already aware that our farming operations here have undergone a most important change, by the intervention of circumstances which afford the most satisfactory evidence of the improving condition of the district I allude to the loss of 24 acres of the land which formed the Workhouse Model Farm, for want of pauper labourers to work it. The extent has thus been decreased to 10½ acres, which now constitutes the School Farm. This may be said to be cultivated altogether by the junior paupers, as there are no able-bodied males in the house now, and it would seem to be about as much as they can well manage. A good deal of the boys' time is now unavoidably taken up, assisting at the household work, which the adults used to do; such as supplying the establishment with water and turf, whitewashing, keeping the yards and walks neat, &c. But I may remark that I make it a rule that they have all to be in attendance in the school-room for three hours every day, and to employ the rest of their time at the farm. The dairy had to be given up with the land. You will be glad to hear that there was no loss of money by the cows. During the two years the experiment was in operation none of them ever took disease; and, when sold out, they realised the full amount they cost.

In other respects, the agricultural department has been going on very favourably. We pay a large rent for the ground we still retain, but it is getting into a state of high cultivation—supplying the inmates with vegetables for two meals every day throughout the year, besides there being a considerable quantity sold. The crops the past season consisted of the usual distribution of grain, vetches, hay, potatoes, turnips, carrots, parsnips, leeks, and onions. They all turned out well, except the potatoes, which, though they looked remarkably well in the drills, returned little more than half a crop of sound tubers. Our carrots did better; they were a very fine crop; one statute acre yielded 18¼ tons, which were sold to a gentleman in the neighbourhood, at 30*s.* per ton. As they have not been removed yet, and it is likely that they may hardly stand the weight they were when taken up, I have debited the inventory a few pounds less. The valuation at the commencement of the year has seriously affected the Balance Sheet this year. There was a loss of £26 by it, in actual money value, which was enough to burden down the little farm almost to bankruptcy. It may be well to notice here the fact, that the larger farm, which enabled us to prosecute the dairy system of farming with so much success, having now been discontinued, the main source of

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Clones Union Workhouse Farm.

pecuniary advantage to the Union has been effectually cut off, for it was chiefly from the dairy, and the fattening of live stock, that the profits were derived. But the loss of the cows and pigs is chiefly to be regretted, inasmuch as the feeding and management of these animals, formed so large a part of the farm service, and were well calculated to habituate both the male and female children to the practice of thriftiness and forethought.

The "Agricultural Class" has been progressing steadily, with the brief interruption last summer to which I directed your attention, on the occasion of your late inspection, and which proceeded from a cause over which I could have no control. There is still a ready demand for the boys, as soon as they are fit to do light work, and can be recommended. The wages they receive are fully equal to those given to the same class of young labourers in the district; and I have remarked that very few return to the Workhouse at the end of their engagements. It appears from the Agricultural Class Register that 31 have been hired during the past year, only 6 of whom have come back—these since November last—one of them alleging that he wanted to get to the night school again during the winter months, and that his mistress had promised to take him back when the spring work sets in.

At present, 14 lads, from 15 to 16 years old, compose my evening class, who, besides receiving a lesson in agriculture, write, and do a little arithmetic. We meet an hour every night, except Monday and Saturday; while other (10 younger) boys receive a similar course of training in the day school from Mr. Harris, our teacher, who is well qualified to impart instruction of a much higher order.

Thus the total number of junior paupers in this Workhouse under agricultural training at the close of the past year, may be stated at 24. I cannot boast greatly of their progress, but they are all very regular in their attendance, and exceedingly attentive; while it affords me sincere satisfaction to think sometimes that these humble endeavours of ours may yet be the means, with the divine blessing, of afterwards raising some of this unfortunate section of our fellow-creatures to a position of independent industry.

I remain, Sir, &c., &c.,

J. KIRKPATRICK, Master of the Workhouse.

Dr. Kirkpatrick,
Agricultural Inspector, &c.

Balance Sheet of the Clones Workhouse Farm Account for the 15 months ended 31st December, 1852.

Dr.

	£	s.	d.
To Amount of Valuation taken 11th October, 1851,*	433	3	10
,, Rent and Taxes for both Farms,†	74	4	2½
,, ,, Seeds, Lime, Manure, &c.,	11	13	7
,, ,, Cattle (expenses),	1	7	0
,, ,, Implements and Repairs,	7	19	8
,, ,, Labour,	9	5	6
	£537	13	9½

Cr.

	£	s.	d.
By Amount received for Grain,	36	15	6
,, Potatoes, &c.,	104	6	8
,, Cattle and Pigs,	166	12	0
,, Dairy produce,	123	17	11½
By Amount of Inventory and Valuation taken 31st December, 1852,	90	19	7½
By Profit and Loss, being Balance against Union,	‡15	2	0½
	£537	13	9½

* There was a deficiency of £26 between the amount of this Valuation and that ultimately realized.

† Of this amount, £36 1s. 8½*d.* properly belongs to the liabilities of the preceding year.

‡ If allowance were made for the foregoing items, which might fairly be placed to the debit of the Account of the previous year, instead of the above apparent *loss* on this year's transactions, there would be a *gain* of £46 19*s.* 8*d.*

Appendix K.

II. Appendix to Dr. Kirkpatrick's Report.

67. Castleblayney Workhouse Agricultural National School.

8th January, 1853.

Castleblayney Union Workhouse Farm.

Sir,—In accordance with your instructions, I beg to submit the following account of our proceedings, in connexion with the agricultural department of the Workhouse for the past year. I took office here on the 12th of May, 1847, and in February last, the agricultural department, in conjunction with the literary, was entirely intrusted to my superintendence. Since that period I have conducted the business of both departments.

We have in this establishment at present 504 inmates, 135 of whom are boys, aged from five to fifteen years, who are all usefully employed in mental and industrial training.

Upwards of 100 attend the male school daily from 10 to 1 o'clock, where, under my own superintendence, they are instructed in Reading, Writing, Arithmetic, Mensuration, Grammar, and Geography. They also receive instruction in the theory and practice of Agriculture, and it is highly pleasing to witness the striking contrast that exists between their present improvement, and the melancholy state of ignorance in which they were sunk at the time of admission to the Workhouse.

The "Agricultural Class" comprises the boys of the second, third, and fourth classes in the school-room; and it affords me much pleasure to say, that their attention and conduct when out on the farm are most satisfactory. They all take great delight in the agricultural part of their education; and it is cheering to state, that no impropriety of conduct, as regards this class, has been yet reported to the Guardians.

Forty-eight boys are at present receiving theoretical instruction in this department, from half-past 1 to 2 o'clock, P.M., the remaining portion of the day being devoted to practical operations on the farm.

The land attached to this establishment consists of 8A. 1R. 8P., statute measure, 3A. 4P. of which were under cultivation last season, and 1 acre more laid out in grass, for which we received £2 3*s*. The remaining 4A. 1R. 4P. are occupied by buildings, boundary fences, road, and grave-yard; thus, leaving for farming purposes, 4A. 4P. statute.

Our time, from the 23rd of February, the day on which operations commenced, until the latter end of April, was chiefly occupied in preparing ground for green crops, the operations consisting of digging, levelling, manuring, clearing off stones, weeds, &c. Some seeds were also sown during this period, and the necessary attention paid to the putting in of cabbage plants, &c.

The subsequent period was almost entirely devoted to the after-culture and management of the different crops. In con-

sequence of the farm not being under a regular rotation last season, we had not a regular succession of crops.

The three and four course rotations are intended to be pursued, if possible, on either one or two acres of the north division of the farm, in order that the boys may become acquainted with the system of grain as well as green cropping, on a small scale. The remaining portion, which is intended for a garden, has been divided by walks, into plots of nearly equal areas, to suit the specified rotations.

The table annexed to this Report exhibits a list of the crops grown upon the farm, the quantity of ground under each, with the estimated value of their respective produce. A portion of the land intended for green crops in the ensuing season, has been trenched and manured since October last. There is particular attention paid to the management of the manure.

I am, Sir, your very obedient servant,

DAVID LOCKHART, Teacher.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

VALUATION of CROPS, taken the 20th day of October, 1852, by Edward Golding, Esq., Vice-Chairman, and two of the Guardians.

Name of Crop.	Quantity of Ground.	Estimated value per Statute Acre.	Amount.
	A. R. P.	£ s. d.	£ s. d.
Cabbages, . . .	1 3 26	16 0 0	30 12 0
Turnips, . . .	0 3 20	18 0 0	15 15 0
Carrots, . . .	0 0 5½	18 0 0	0 12 4½
Parsnips, . . .	0 0 12	13 6 8	1 0 0
Onions, . . .	0 0 7	supposed	0 10 0
Leeks, ...	0 0 7	to be	0 10 0
Cabbage plants, . .	0 0 6½	worth	0 8 8
Total, . .	3 0 4		49 8 0½

BALANCE SHEET for 1852.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To Amount Valuation at commencement of year,	5	12	0	By Amount of Inventory and Valuation taken at close of the year, inclusive of proportion of unexhausted Improvements,	49	8	0½
,, paid in Rent, Taxes, &c.,	4	7	6				
,, ,, eeds, Lime, Manure, &c.,	3	14	2½				
,, ,, New Farming Implements. &c.,	1	0	4				
,, ,, Labour,	0	12	0				
To Profit and Loss, being gain on the year,	34	2	0				
	£49	8	0½		£49	8	0½

68. MONAGHAN WORKHOUSE AGRICULTURAL SCHOOL.

Monaghan Union Workhouse Farm.

8th January, 1853.

SIR—In compliance with your request I beg leave to send you a Report of the first year's proceedings in connexion with the agricultural department of the Workhouse. In January last it was resolved by the Board of Guardians—"that a piece of ground not exceeding one statute acre be set apart to be cultivated by the boys," under my directions. When this portion of land was given in charge to me, I commenced as soon as possible to trench about one-third of it, as a preparation for tap-rooted crops. The remainder of the ground I dug up in a rough way, exposing it as much as possible to the action of the atmosphere, and that it might be dry in a short time for the reception of seeds or plants.

Having no "Farm Account Book" I made a kind of diary to show the times at which I sowed the different kinds of seeds, and the attendant expenses, which book I herewith transmit to you as requested. I do not think it necessary to enter here into details as to the crops cultivated, as the form of Returns which you sent me will show all the particulars. I may remark however, that I sowed a pound of parsnip seed in April, none of which made its appearance above the ground; I then sowed turnips without altering the drills.

I may state that one good effected by the industrial training of these boys is, that many of them have been hired by farmers, when they had seen how skilfully and industriously they could work, to earn their own bread by useful and honest means, that they may no longer be a burden on the community

In concluding my report for this year, I may say, that during the last twelve months, the average number of boys attending school was less than 100, and of this number about 30 of the larger boys attend linen-weaving, which was established two years ago: so that it was the middle-sized boys (aged from nine to thirteen years old) who worked with me in the garden.

The "Agricultural Class" consists of thirty boys, who receive instruction in agriculture for half an hour each day. They are selected from the higher classes in the school. Some of these receive no practical instruction, as they attend the weaving after school-hours.

I am, Sir, your obedient servant,

W. M'ELNEY, Teacher.

To Dr. Kirkpatrick,
Agricultural Inspector.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Monaghan Union Workhouse Farm.

BALANCE SHEET of the Monaghan Union Workhouse Agricultural School Farm for 1852.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To Amount paid Manure and Rent,	2	0	0	By Amount value of crop, as per valuation :—			
,, County Cess,	0	2	0	,, 4,900 Cabbage plants, at 6*d.* per,	1	4	6
,, Manure, estimated value,	1	0	0	,, 1,320 Cabbage heads, at 7*d.* per dozen,	3	4	2
,, 1lb. Onion seeds,	0	2	8	,, 15 cwt. Onions, at 5*s.* per cwt.	3	15	0
,, ½lb. Flag Leek seed,	0	2	0	,, Leeks,	1	16	0
,, 1lb. Parsnip seed,	0	1	0	,, 16 tons turnips, at 15*s.* per ton,	12	0	0
,, 1½lb. Swede Turnip seed,	0	1	3				
,, ½lb. Cabbage seeds,	0	4	2½				
,, 1,200 Cabbage plants,	0	3	0				
To Balance in favour of Union for labour of boys,	18	3	6½				
	21	19	8		21	19	8

TABLE showing the CROPPING of the Monaghan Workhouse National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	Perches.				tons cwt. qrs.			
Onions,	14	April,	September	11 lbs.,	8 17 0	No Rent, labour gratuitous.	Not ascertained.	A very good crop.
Leeks,	7	April,	Transplanted in Aug.,	11 lbs.,	Not ascertained,			A very good crop.
Cabbage seeds,	9	April,	June,	8 lbs.,	—			Not an average crop.
Cabbages,	14	May,	Oct., Nov., Dec.,	14,520 plants,	52 tons,			Planted 2 feet by 1½.
Turnips,	79	May,	December,	3 lbs.,	32 tons,			
Parsnips,	—	April,	Failed,	—	—			Turnips sowed in its place.

(Signed), WILLIAM M'ELNEY, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief.

JAMES MITCHELL, Manager.

8th January, 1853.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Monaghan Union Workhouse Farm.

Appendix K.

II. Appendix to Dr. Kirkpatrick's Report.

69. Kilmallock Poor Law Union Agricultural School and Model Farm.

January, 6, 1853.

Kilmallock Union Workhouse Farm.

Sir,—In compliance with your instructions, I beg to furnish you with the following Report on the Agricultural department of this Workhouse for the past year (1852).

In December, 1851, the farm was divided into two divisions, for the purpose of carrying on the four and five courses of rotation, which I considered best suited to the nature of the soil, which is a calcareous clay, resting on a hard, impenetrable subsoil of clay and marl.

In establishing these rotations, I was obliged in some parts to deviate from the rules of good husbandry, on account of the way in which the farm had been cropped before I entered on its cultivation. On two of the divisions of this course, I was obliged to take two root-crops in succession.

The crops in the four-course rotation were as follows :—

No. 1 (which was old lea), oats and barley.

No. 2 (which was previously cropped with turnips), turnips (after turnips).

No. 3, oats, with grass and clover seeds.

No. 4, mangel wurzel and winter vetches (after turnips).

The portion of the farm on which the five-course was to be carried out, was all old lea, which portion was prepared and cropped in the following manner, viz. :—

Field No. 1, turnips and potatoes in ridges ; field No. 2, flax ; field No. 3, oats, and fields Nos. 4 and 5, grass.

The entire tillage of the farm was performed by spade labour, and for the most part by boys from ten to sixteen years of age.

It is the intention of the Guardians to purchase cattle for the consumption of the farm produce, as soon as possible.

The crops grown in the garden for this year were cabbages, interlined with beans and potatoes, onions, leeks, and peas ; but from the soil not having been drained, the crops were not as good as might have been expected.

The operation of draining is now being performed upon it, and I expect more favourable returns from it in future.

During the past year there has been reclaimed, by the levelling of the interior fences on the farm, and the cutting away of a portion of the boundary fence, about one and a-half acre ; and I expect that when a new boundary fence is made, an extent of half an acre will yet be reclaimed.

The roads on the farm are being constructed at present, and when completed, they will tend to facilitate in a great measure the several operations thereon.

The accumulation and preservation of manure have been particularly attended to ; and I expect that the quantity and quality will be much improved from that of last year.

My particular attention has been directed to the proper tillage of the various crops, and the result is, that on the very same soil on which but fifteen tons of turnips, to the statute acre, had been formerly raised, an average of fifty tons has been produced, and forty-four of mangel.

Kilmallock Union Workhouse Farm.

Agricultural Instruction.—There is at present a class of sixty boys, selected from the more advanced classes, who receive agricultural instruction. They are employed each day on the farm from 10 o'clock, A.M., to 2 o'clock, P.M. (in summer they will be thus employed—from 8 o'clock, A.M., to 4 o'clock, P.M.), and from that until 5 o'clock, P.M., they are employed at their agricultural studies. They also receive a lecture every evening for an hour.

Previous to the adoption of the foregoing arrangement, there was no regular plan of affording agricultural instruction; but now, as a separate school-room is allotted to their use, I expect that their instruction will be carried on in a more satisfactory and efficient manner.

Since this course of procedure was adopted, I find a decided improvement in their general conduct, as well as a better inclination to attend to their several duties.

I have the honour to remain, Sir, your obedient servant,

P. F. O'HAGAN.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector of National Schools.

SUMMARY of the Year and BALANCE SHEET.

Dr.

	£	s.	d.
To amount Valuation commencement of Year, .	155	10	0
,, paid in Rent, Taxes, &c., . . .	72	15	0
,, paid for Seeds, Lime, Manures, &c., .	20	4	5
,, paid for new Farming Implements, &c., .	1	18	4
,, paid for Labour,*	69	1	1½
Profit and Loss, being balance in favour of Union, on account of pauper labour, ...	207	3	1½
	£526	12	0

Cr.

	£	s.	d.
By amount received for Grain, ...	52	1	5
,, ,, Potatoes, Roots, &c., . .	130	4	7
,, ,, Cattle sold, . . .	43	5	0
,, ,, Dairy produce, . . .	24	17	2½
Amount of Inventory and Valuation taken at close of year, inclusive of proportion of unexhausted improvements, ...	276	3	9½
	£526	12	0

* This includes a sum of £58, being the amount of salary paid to steward and assistant.

TABLE showing the CROPPING of the Kilmallock Workhouse National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.					£ s. d.	£ s. d.	
Oats,	8 1 7	From March 18 to 29,	From August 20 to 31,	9 stone,	250 st. grain, 6 tons straw,	3 6 5	0 16 10*p.*	This crop was sold by auction at less than its value.
Hay,	5 2 30	Grown on old lea,	July 15,	Produced from old lea,	3½ tons,	2 1 11	0 17 6*p.*	
Flax,	2 1 28	April 10,	Between August 20 and 28,	3 bushels,	3 tons straw, 7½ bushels of seed,	3 12 5	1 0 0*p.*	
Barley,	0 1 3	May 13,	September 19,	8 stone,	250 st. grain, 4 tons straw,	2 17 11	11 12 0*p.*	
Beans,	0 2 0	March 13,	September 13,	3½ bushels,	30 bushels,	5 18 5	6 1 6*p.*	
Winter Vetches,	0 3 9	Nov. 3, 1851,	June,	2½ bushels,	30 tons,	3 9 10	11 0 1*p.*	
Turnips,	5 1 1	Between May 22 & June 10,	November and Dec.,	5 lbs.,	50 tons,	9 15 9	23 10 10*p.*	
Mangel Wurzel,	3 0 38	Between May 1 and 15,	November,	7 lbs.,	44 tons,	9 17 11	20 19 0*p.*	
Cabbages,	1 2 38	From Nov. 1 to Dec. 30,	May and June,	8,712 plants,	About 40 tns.	6 3 3	10 16 8*p.*	
Potatoes,	1 0 0	March and April,	July and August,	12 cwt.,	About 2 tons,	9 19 11	4 13 3*l.*	This crop was very much injured by blight.
Parsnips,	0 1 0	April 15,	November,	6 lbs.,	About 10 cwt.	8 2 11	7 12 11*l.*	A complete failure of seed.
Cabbages,	0 1 20	April and May,	Sept., Oct., & Nov.,	7,260 plants,	30 tons,	5 19 11	8 1 0*p.*	
Onions,	0 0 20	Between April 4 and 30,	November and December,	6 lbs.,	8 tons,	9 5 7	70 14 4*p.*	
Leeks,	0 0 4			6 lbs.,	8 tons,	9 10 6	70 4 2*p.*	

(Signed), PATRICK F. O'HAGAN, Agriculturist.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

8th January, 1853. D. MOORE, Clerk of Union.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Rathkeale Union Workhouse Farm.

70. RATHKEALE UNION—BALLYENGLAND AUXILIARY WORKHOUSE, County Limerick.

January, 1853.

SIR,—Pursuant to directions, I beg to forward you my Report on the Agricultural Department of the Rathkeale Workhouse National Schools.

In the end of last October, the former Agriculturist left, and then (by an order of the Board of Guardians), the duties of Agriculturist devolved on me, in addition to the duties of Head Schoolmaster and Master of the establishment. There are two other paid officers, one an assistant schoolmaster, and the other a land steward, whose duty it is to superintend the labour of the working class, subject to my directions.

Up to the present year this farm contained only 9½ Irish acres, or 15A. 1R. 22P., statute measure; but in the past summer the Guardians extended the farm to 25 statute acres, which they hold now for the same rent as they paid for the small farm originally, namely, £75 per annum. Leaving out £50 as the rent of the building, there would remain £25 per annum as rent for the land, *i.e.*, £1 per statute acre. In consequence of the additional land being taken at a late time of the year, no part of it has yet been put under cultivation, but a part of it has got a preparatory digging, and directions have been given to plough the remainder of it for spring cropping. It will be seen by the "Statistic Sheet, (No. 2)," that only 10¾ acres were under cultivation this year, the difference between that and what the farm originally contained being taken up by buildings, roads, &c.

The crops cultivated this year met with disappointments, otherwise there would be a greater balance in favour of the farm. The parsnips, at an early stage of their growth, were nipped by the wire-worm, which caused them to fork, and throw down a number of small roots, producing a crop scarcely worth the labour that attended their cultivation. The carrots were a fair crop. The turnips were also a fair crop, and at an early stage of their growth, promised to make very profitable returns, but they were attacked by a sort of disease which prevailed in various parts of the neighbourhood, viz., a black rot. On taking them out of the ground, I caused all the partially decayed ones to be selected for immediate consumption. Again, when weighing them, to ascertain the acreable produce, I found the disease still progressing, which I immediately reported to the Board of Guardians, who invited tenders for the sale of as much of them as would not be required for consumption in the Workhouse. I caused them to be ricked around a yard, alongside a dry wall, where they are well thatched, and where, I trust, they will keep safe.

The barley was put in with clover and grass seeds, it was a good crop, except that it grew too rich and lodged; it was

Rathkeale Union Workhouse Farm.

sold in stooks, and made £9 2*s.* 6*d.* The grass and clover are doing well. The onions did not turn out well; but the leeks are an excellent crop, a good deal of them were transplanted out where the onions failed, and they are now becoming a good crop. There was a great deal of good cabbage grown in the alleys, between the onions, &c., and also between the drills, where the parsnips failed.

All the work of the farm was done with the spade; the barley was put into the drills made by *boys*, and no expense incurred in horse-hire, except £1 14*s.* 9*d.*, which was paid for drawing out manure. The land heretofore, was dug into raised ridges every winter, for the purpose of bringing a greater quantity of surface under the influence of the atmosphere; but now that there is more land, and a decrease in the number of workers, this practice must be dispensed with, except in cases where such may be absolutely necessary, as for the suppression of weeds, &c.

The manure yard is at one end of the farm, about 60 yards from the house. In this yard there is a tank for the reception of the urine and excrements, which are conveyed into it by under-ground sewers, from the privy and adjoining cesspool. Old straw, dry clay, and every other absorbent substance that can be procured, are collected to the tank for the purpose of being mixed with its contents, and when properly saturated with the urinary and excrementitious matter, the whole is made up in a curved heap resembling a potato pit, and covered on the outside with clay, or any other procurable substances that may prevent the escape of the volatile gases, and the dung heap is so situated, that any juices flowing from it, are conveyed by "water-tables," back to the tank whence they were originally taken, and thus, the escape of any of the liquid-manure, so replete with fertilizing matter, is effectually prevented. I regret there is no watering cart for the conveyance of this liquid to the fields or kitchen-garden; and I have no doubt but a judicious application of it, would check the ravages made by the wire-worm on the young parsnip crop last summer.

There are, at present, only 23 adults in this establishment, but all the children under 15 years, who are able to work, are obliged to spend a portion of the day at agricultural and other industrial labour. My system of management is as follows:—all persons able to work, are divided into two divisions—Nos. 1 and 2. No. 1 division goes to work at 10 o'clock in the morning, and the other division goes to school at the same time; at 1 o'clock both divisions change places, those that worked in the morning being at school in the evening, and *vice versa*. By this management, I am enabled to give every boy not less time in school than three hours, as specified in the regulations of the Poor Law Commissioners; those who are not able to work in the field, continue at school all day. The "Agricultural Class Book" is read by those who

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Rathkeale Union Workhouse Farm.

are able to comprehend the subjects of which it treats, and those labourers who are not able to comprehend its subjects are divided among the junior classes, where they get the instructions best suited to their capacities, and where they are prepared for the comprehension of the subjects, treated of in the "Agricultural Class Book."

In conclusion, I beg to remark, that for some time, I have been witness of the highly moral and sanitary effect of constant and well-directed industry, on Workhouse children. When I see a number of young lads return in the evening from their work, with rosy cheeks, cheerful countenances, and healthy constitutions—when I take into account the great improvement which they, in a short time, make in the various agricultural operations in which they are engaged, whether in the field or kitchen-garden, and compare them with the stupid, slovenly, and surly dispositions of many of those less fortunate ones, who spend their years trudging round the back-yards of a confined workhouse, studying nothing save mischief and idleness—I am convinced that the odds is entirely in favour of those who, under the guidance of kind, but firm and skilful superintendents, devote their time to the attainment of that agricultural skill, which is the surest and safest agency by which man attains a respectable status in the scale of moral and social happiness.

I am, Sir, your very obedient servant,

JOHN L. WALLACE,
Schoolmaster and Agriculturist.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

BALANCE SHEET of the Farm Accounts for the Year ended 31st December, 1852.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To Rent of 25 acres, at £1 per acre,	25	0	0	By Turnips, 55¼ tons, at 10s. per ton,	27	2	6
To Horse-hire,	1	14	9	By Flax, 1½ tons, at £4 per ton,	6	0	0
To Seeds,	6	0	0	By Barley,	9	2	6
To Profit and Loss, being balance in favour of Union, on account of Pauper Labour,	45	0	3	By Cabbage,	3	10	0
				By Onions and Leeks, at 1s. per stone,	20	0	0
				By Parsnips, ¾ ton, at £2 per ton,	1	10	0
				By Carrots, 4¼ tons, at £2 per ton,	8	10	0
				By Flax seeds,	2	0	0
	£77	15	0		£77	15	0

Had the new land been taken in time to till it, I am confident there would be a large balance in favour of the farm.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Rathkeale Union Workhouse Farm.

TABLE showing the CROPPING of the Rathkeale Workhouse National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.							
Turnips, . . .	4 0 0	I do not know the period of sowing, not being then in charge.	November, . .	I do not know the quantity of seed per acre, not being in charge at the time of sowing.	$13\frac{13}{16}$ tons, .	I cannot answer this, as there is no account of the quantity of seed per acre in the different crops; but the average expense is £4 3s. 6¾d. on each acre of the culture.	As in the other column, I cannot answer this, except on an average of the whole. The average profit on each acre of the culture is £4 3s. 9d.	Being put in charge at a late time of the year, and having no "Farm Account Book," there are some questions which I cannot answer. It will be seen that 10¾ statute acres, produced (on the whole), £77 15s. 0d., while all expenses on said 10¾ acres, including rent, amounts only to £32 14s. 9d., which taken from the value of produce, leaves £45 0s. 3d., to the credit of those 10¾ acres, or an average profit of £4 3s. 9d. on each acre cultivated.
Carrots, . . .	0 3 0		November, . .		$5\frac{2}{32}$ tons, .			
Parsnips, . . .	1 0 0		December, . .		$\frac{3}{4}$ tons, .			
Flax, . . .	1 2 0		July, . . .		1 ton, . .			
Barley, . . .	2 1 0		August, . .		Not known.			
Onions, . . .	0 2 20		August, . .		Valued at 320 stone per acre,			
Leeks, . . .	0 2 20		Yet in ground,		—			
Cabbage in the alleys.	—		August, some yet in ground,					
Total, . .	10 3 0							

(Signed), JOHN L. WALLACE, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief.

MICHAEL FITZGIBBON, Clerk of Union.

January 8, 1853.

71. Newcastle Workhouse Agricultural National School.

Summary of the Year and Balance Sheet.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To Amount paid in Rent and Taxes,	21	10	1	By amount received for Grain,	28	11	3
,, for Seeds,	14	13	1	,, for Roots, &c.,	46	11	0½
,, for new Implements and repairs,	3	16	10	By amount of Inventory and Valuation taken at the close of the year, inclusive of proportion of unexhausted improvements,	89	17	10
,, for Labour,	59	17	10½				
,, Agriculturist's Salary,	40	0	0				
To Profit and Loss for balance, being gain,	25	2	3				
	£165	0	1½		£165	0	1½

In consequence of the Guardians selling the crops by auction, contrary to Agriculturist's suggestions, the farm sustained a loss of over £50, as some of the crops were sold for only half their value, as can be seen by returns of parsnips, carrots, and sugar beet. The Agriculturist, therefore, did not charge the farm with the gratuitous labour of the pupils. Mr. M'Loughlin (National School Inspector) visited the farm in spring, 1852; it was then in process of draining, and in an impoverished state. He visited it again in September following; it was then in the highest state of cultivation.

TABLE showing the CROPPING of the Newcastle Workhouse National School Farm, for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.				£ s. d.	£ s. d.	£ s. d.	
Barley, . . .	4 0 0	April 20, . .	September 29, .	11¼ stones, .	7 2 9¾	5 0 2¾	2 2 7*p.*	I have not included the cabbage seeds nor leek seeds, as they did not occupy much land, and are now a stolen crop. They are included in the Balance Sheet.
Onions, . . .	1 1 13⅕	April 1, . .	October 10, . .	18 lbs., .	14 14 3⅗	4 19 11	9 14 4*p.*	
Carrots, . . .	1 1 13⅕	April 1, . .	November 3, . .	6⅔ lbs., .	4 4 0	4 6 7	0 2 7*l.*	
Parsnips, . . .	1 1 13⅕	March 27, . .	November 3, . .	8 lbs., .	4 4 0	4 5 11	0 1 11*l.*	
Beet, ...	1 1 20	May 1, . .	November 3, . .	7½ lbs, .	5 9 10½	5 13 6	0 3 7½*l.*	
Turnips, . . .	6 2 20	June, . .	December 1, . .	3¾ lbs., .	8 14 0½	4 8 4½	4 5 8*p.*	
Flax, ...	3 0 0	April 20, . .	September 4, . .	2 bushels, .	5 16 8	4 9 8½	1 6 11½*p*	

(Signed), LAWRENCE O'SHAUGHNESSY, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief.

January 5, 1853. EDWARD CURLING, V.C., Manager.

72. CLONMEL WORKHOUSE FARM, Co. Tipperary.

December 31, 1852.

SIR,—In accordance with your instructions of 10th November, I beg leave to submit my Report on the agricultural department of the Clonmel Workhouse. The farm contains 40 statute acres, of which 21A. 2R. 23P. were in possession when I was appointed Agriculturist, on 15th December, 1851. The remaining portion, 18A. 1R. 17P., the Guardians obtained possession of on 29th September last. Of the 21A. 2R. 23P. previously in possession, 8A. 1R. 16P. were occupied with the materials for the erection of the new Workhouse, so that there remained available for cultivation last season only 13A. 1R. 7P.

The soil is of the first class—dry, deep, and very friable. The subsoil is a strong siliceous clay, resting immediately upon the limestone formation. This farm is peculiarly adapted for the raising of green crops. We have, as yet, no particular rotation of cropping. In consequence of the abundance of manure at the Workhouse, of the unlimited supply of free labour, and of the quantity of vegetables consumed by the inmates and cattle, green crops will be predominant, and occupy an important position in the subsequent operations on this farm.

The rotation for workhouse farms must generally be a rotation of green crops, based upon a scientific analysis of their composition, and having due reference to their *mode of growth*. I have, therefore, subjoined the rotation of cropping that is intended to be carried out on this farm.

	Field, No. 1.	No 2.	No. 3.	No. 4.	No. 5.
First Year.	Potatoes, Carrots, and Parsnips.	Flax and Beans.	Cabbages, Turnips, and Mangels.	Grasses.	Oats and Vetches, with Grass Seeds.
Second Year.	Oats and Vetches, with Grass Seeds.	Potatoes, Carrots, and Parsnips.	Flax and Beans.	Cabbages, Turnips, and Mangels.	Grasses.
Third Year.	Grasses.	Oats and Vetches, with Grass Seeds.	Potatoes, Carrots, and Parsnips.	Flax and Beans.	Cabbages, Turnips, and Mangels.
Fourth Year.	Cabbages, Turnips, and Mangels.	Grasses.	Oats and Vetches, with Grass Seeds.	Potatoes, Carrots, and Parsnips.	Flax and Beans.
Fifth Year.	Flax and Beans.	Cabbages, Turnips, and Mangels.	Grasses.	Oats and Vetches, with Grass Seeds.	Potatoes, Carrots, and Parsnips.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick'sReport.

Clonmel Union Workhouse Farm.

The quantity of ground under this rotation will be 32A. 1R. 23P. As those crops will be consumed by cattle for the production of milk, and the cows being house-fed, this rotation will support as many cows as there are acres. The above five-crop course, I am well aware, is liable to some modifications, but, on the whole, it is a rotation that will return a large amount of nutritious produce. The above rotation is formed upon the principle of raising the largest amount of nutritive matter in the most condensed form. If we can raise a certain weight of produce, say 30 tons of Swedish turnips, or 35 tons of mangels, to the statute acre, we can also raise upon the same ground, with the same expense, 20 tons of carrots or parsnips; but carrots is a more nutritious crop, by two and one-half times, than turnips, and parsnips three times more than mangels. Cabbages also is a more nutritious crop, for they contain the *protein* compounds to a larger extent than either turnips or mangels.

I do not consider it necessary to enter here into the particulars of the arrangements adopted for the agricultural instruction of the pauper boys, or of the success that has attended our labours, as such will be found fully detailed in the annexed Report, which I had the honour of submitting for the information of the Board of Guardians.

I am, Sir, your obedient servant,

DAVID CUNNINGHAM, Agriculturist.

Thomas Kirkpatrick, Esq., M.D.,
Education Office, Dublin.

To the BOARD of GUARDIANS of the CLONMEL UNION.

Clonmel, 6th December, 1852.

GENTLEMEN,—It is with great pleasure I submit my first Report, together with the Balance Sheet and Statistics of Cropping of the farm in connexion with the Workhouse.

I beg, in the first place, to direct your attention to the system of training the paupers to work.

There are upwards of 200 boys working upon the farm. These boys are divided into three distinct divisions. The first division consists of upwards of 20 boys, whose ages vary from 15 to 17 years of age; this division works constantly upon the farm, and performs all the heavy work.

The second division of 90 boys, aged from 12 to 15 years, is divided into three classes, each numbering 30 boys. These classes work alternately upon the farm, and it is upon this division that the more important operations of the farm devolve.

The third division of 90 boys, aged from 9 to 12 years, is divided, like the second, into three classes, and each class

works alternately upon the farm, and perform all light work. By this system of classification there can be no undue influence exercised in making one class attend the farm more than another, or receive less instruction at School. The same systematic arrangement is carried out in the farm, even to the most trifling work, it is therefore impossible that one pauper can work more than another, and it is to this that I attribute the success of gaining the confidence of the paupers, and of carrying on the operations of the farm in a satisfactory and prosperous manner.

As the Balance Sheet is generally taken as the criterion whereby to judge of the successful working of the farm, I beg to remark, that although it does not show a very favourable result in the present instance, it should not from thence be inferred that our labours have been unsuccessful. In order to prove this, I have, in the first place, to direct your attention to the wretched state of the farm when we commenced operations, to the small proportion of the farm under crop last season, to the large expenditure necessary to bring a portion of the farm to produce crops, and to the difficulties that had to be surmounted in bringing into working order a system of farming altogether strange to the unpractised hands of the inmates of a Union Workhouse. Further, by reference to Return No. 2 of "Statistics of Cropping," it will be seen that upwards of $5\frac{1}{2}$ acres of crops, over which I could exercise little or no control, have produced a considerable loss. But if we take as data the green crops in the same return, it is very evident that future balance sheets will exhibit a very different result.

I am well aware that it is not so much the object of your Board to make the farm a source of profit as to train up the pauper youth to habits of industry and independence; it is, therefore, the more gratifying for me to state, that the majority of the paupers have evinced a decided willingness to work with that expertness and activity which will be of the utmost benefit to them in after life, by fitting them as an intelligent, industrious, and skilled class of labourers: a class so much desired in this country.

It has been my principal aim to take advantage of every opportunity, to impress upon their minds the importance of a thorough knowledge of the principles of *green cropping*. With this view, the Agricultural Class Book, published by the Commissioners of National Education, has been put into the hands of the more advanced classes. While they are thus receiving instruction in the principles of the business by which, it is hoped, they will be able to maintain themselves in after life, their literary education has not been neglected—for their attainments in the latter department are such as may vie with, if not excel, those of any other Workhouse School in Ireland.

I am, Gentlemen, your obedient and humble servant,

DAVID CUNNINGHAM, Agriculturist.

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Clonmel Union Workhouse Farm.

BALANCE SHEET of the Clonmel Workhouse Farm.

Cr.	£	s.	d.
To Amount paid in Rent and Taxes,	40	13	4
,, ,, Seeds and Manure,	38	10	0
,, ,, Implements,	17	8	0
To Profit and Loss for gain, being Balance in favour of Union for Pauper Labour,	16	17	5
	£113	8	9

Dr.	£	s.	d.
By amount received for Oats,	12	0	0
,, ,, Parsnips,	9	7	6
,, ,, Carrots,	7	7	4½
,, ,, Cabbages,	8	15	10½
,, ,, Onions,	1	0	0
,, ,, Flax and Tow,	1	5	0
By Inventory and Valuation,	73	13	0
	£113	8	9

TABLE showing the CROPPING of the Clonmel Workhouse National School Farm, for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.				Sold at £ s. d.	£ s. d.	£ s. d.	
Oats,	4 0 15	March 20,	August 14,	15 stones,	2 13 7½	5 9 6	2 10 10½	Loss.
Cabbages,	1 1 21	February 28,	September,	15,488,	6 8 0	7 10 0	1 2 0	Loss.
Turnips,	2 0 14	May 22,	December,	7 lbs.,	15 0 0	7 11 10	7 8 2	Profit.
Parsnips,	0 1 35	April 3,	December,	7 lbs.,	20 0 0	7 15 10	12 4 2	Profit.
Carrots,	0 1 35	April 10,	December,	7 lbs.,	15 4 6	7 15 10	7 8 8	Profit.
Onions and Leeks,	0 0 12	April 10,	September,	16 lbs,	26 12 0	9 0 0	17 12 0	Profit.
Flax,	0 0 35	April 3,	August 20,	2½ bushels,	5 15 6	6 11 10	0 16 4	Loss.
Fallows,	4 2 0	—	—	—	—	—	—	
Total,	13 1 7							

(Signed), DAVID CUNNINGHAM, Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

31st December, 1852. T. GATCHELL, Clerk of Union.

Appendix K.

II. Appendix to Dr. Kirkpatrick's Report.

73. Carrick-on-Suir Workhouse Agricultural School, County of Tipperary.

January, 1853.

Carrick-on-Suir Union Workhouse Farm.

Sir,—In compliance with your request, I beg to submit the following statement, relative to the working of the farm, and the instruction of the junior paupers of the Carrick-on-Suir Workhouse.

As my appointment did not take place until 1852, it was impossible that I could have the farm in that high state of cultivation which I otherwise might.

The farm, as may be seen by the statistical Return No. 1, contains 28a. 2r. 7p., statute, has a southern aspect; the soil, a deep loam, is capable of being highly improved by good cultivation; the rotation followed is the four-course.

As workhouse farms are generally tilled for the production of vegetables for the use of the inmates, and also, to raise the greatest possible quantity of green feeding for stock (when kept), the same rotation which would suit for ordinary farms, would be wholly unfit for these establishments. From these considerations, and in consequence of the Railway cutting off 3a. 1r. 38p. which is difficult of access, I intend following the three and the four course shifts, laying down that portion intercepted by the railway to permanent pasture.

At present no stock is kept on the farm, but the Board of Guardians have came to the determination of keeping 10 cows at present, which can be increased to a greater number as soon as suitable offices have been provided, which are now in course of erection.

Working of the Paupers.—The pauper boys are divided into two sections, those above and those under 15 years of age. The former work for the space of 6 hours in winter, and 8 or 9 in summer and autumn, in performing the several operations of the farm.

From the fluctuating nature of the attendance of workhouse paupers, it is impossible that they can be taught any great amount of scientific agricultural knowledge, but they are well initiated into the practical details of farm management. I especially endeavour to impress upon them the advantage and necessity of habits of thrift and industry, the principal object of our institution being to make them honest and industrious members of society.

In consequence of the lateness of my appointment, I did not sow any crops save turnips and mangels, the other crops, parsnips, carrots, oats, &c., being sown previous to my taking charge of the farm. I laboured under great disadvantage in getting the ground prepared for these crops; still I have realized a fair average return, the turnips producing 40 tons, and the mangels 55 tons to the Irish acre.

Not having been furnished with the "Farm Account Book"

Carrick-on-Suir Union Workhouse Farm.

when I commenced operations, I was unable to keep the accounts according to the method prescribed; but I intend keeping them regularly during the coming year.

In filling up the "Statistical Returns," I have taken the lowest average, and I beg to remark, that my salary, at £30, and rations at £10 per year, should not be debited to the farm, as it is to be considered that the *instruction of the boys*, both practically and scientifically, should be a full equivalent for these items.

I am, Sir, your very obedient servant,

JAMES DUNNE, Agriculturist.

Thomas Kirkpatrick, Esq., M.D.,
&c., &c.

[BALANCE SHEET.

BALANCE SHEET of Farm Accounts of Carrick-on-Suir Workhouse Farm for the year 1852.

Dr.	£	*s.*	*d.*
To Amount of Valuation at commencement of year,	29	10	0
,, paid for Labour,	13	16	10
,, paid for Rent,	99	15	7
,, paid for Seeds,	4	11	1
,, paid for Smith work,	5	0	0
,, paid to night Watchmen half the year,	7	16	0
,, Agriculturist's salary and rations,	40	0	0
To Balance in favour of Union on account of Pauper labour,	21	6	4
	£221	15	10

Cr.	£	*s.*	*d.*
By Amount received for Grain,	33	18	10
,, for Vegetables sold,	9	13	4
,, for Vegetables consumed by inmates,	10	11	8
,, for Hay sold,	8	2	0
By Amount of Inventory and Valuation taken at close of the year,	159	10	0
	£221	15	10

TABLE showing the CROPPING of the Carrick-on-Suir Workhouse National School Farm for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.						£ . d.	
Turnips, . .	28 2 7	May, . .	February, . .	4 lbs., . .	25 tons, .	Pauper pupils' labour, no charge.	15 0 0*p.*	
Mangels, . .		May, . .	January, . .	5 lbs., . .	34 tons, .		25 18 0*p.*	
Parsnips and Carrots,		—	—	—	—		12 0 0*p.*	As I was not here at the commencement of the year I cannot give an account of these crops.
Cabbages, Onions, & Leeks, . .		—	—	—	—		12 0 0*p.*	
Flax, . .		—	—	—	—		5 0 0*p.*	
Oats, . . .		—	—	—	—		6 15 0*p.*	
Hay, . . .		—	—	—	—		—	
Barley, . .		—	—	—	—		1 0 0*p.*	

(Signed,) JAMES DUNNE, Agricultural Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief.

L. H. JEPHSON, Chairman.

Appendix K.

II. Appendix to Dr. Kirkpatrick's Report.

Enniscorthy Union Workhouse Farm.

74. Enniscorthy Workhouse National School and Model Farm, County Wexford.

5th January, 1853.

Sir,—In compliance with the directions contained in the Official Circular of 6th November, 1852, I beg to forward you the Farm Account Book, with the "Returns of Statistics and Cropping," for the year ending 31st December, 1852, together with a statement of the operations in connexion with the Agricultural Department of this establishment, and their results.

So much had been said of the cultivation of sugar-beet, and the different varieties of mangel, I was induced to try some experiments on their growth. The last week in April I commenced sowing mangel and carrots on the following system:—the land being well and deeply dug, pulverized, and brought to a level surface, the beds for the carrots were laid off, 4 feet in breadth, leaving a space of 14 feet between each bed, this space being afterwards sowed with six drills of mangel. 50 tons of well decomposed manure per Irish acre, being spread on the carrot beds, was immediately dug in, to the depth of 12 inches; a small furrow being formed at each side, was shovelled evenly over the beds, which were then neatly raked, and three lines of carrots sown lengthways in each. The mangel drills were then opened, and the manure barrowed out. I found it expedient to have the manure dug in also, as the bottom of the drills were much hardened by the feet. The after-culture was well attended to.

At the raising of the crop I was very anxious to ascertain accurately the weight of each drill, as there had been such a marked difference in the outer drills compared with the inner, which attracted much attention at all stages of their growth.

The results were as follows, the roots being trimmed as if for sale:—the outer drills next the carrots, 15½ cwt.; 2nd drill, 13 cwt.; 3rd drill, 12 cwt.; thus showing a difference of 3½ cwt. from the outer drills to the inner. The drills in all cases, were 14 Irish perches long. The result of this experiment, goes far to prove the great advantage of the *alternate* system, or to have as many *outside* drills of mangel as possible. This could be effected to a greater extent, by leaving only four drills instead of six between each bed of carrots. On thin, light soils, the furrows from each side being shovelled up on the carrot beds, would increase the depth. The three rows of carrots on each bed, would not take up more space than two drills of mangel. Though the carrots were attacked by the wire-worm at an early stage of their growth, a good crop was realized.

The next experiment was long red mangel and carrots on the alternate system. This was tried in the upper side of the same field, the soil not so rich as in the first case.

However the same quantity of mangel being sowed in the usual way by itself, on half an acre, afforded ample opportunity to test both. The drills in this case were 15½ Irish perches long; the roots of five drills of each lot were trimmed as before, and when weighed, showed a difference of 2½ cwt. in each drill, or 12 tons 10 cwt. per Irish acre, in favour of the *alternate* system.

I much regretted not having sown some carrots in the usual way, apart from the rest, which leaves me at present unable to say whether the produce would be more or less than on the *alternate* system.

Having a great desire to ascertain the produce of sugar-beet, as compared with the different varieties of mangel, on the same soil and treatment, I commenced on the 10th of May with long red mangel, orange globe, and red globe. The manure supplied to those crops, was the solid contents of the cesspools, deodorized with charred peat, and mixed with rich earth, the result of this trial stood thus:—

Long Red Mangel, . .	80 tons per Irish acre.
Orange Globe do., . .	76 ,,
Red Globe do., . .	65 ,,
Sugar Beet, ...	70 ,,

The quantity of land under this trial was 20 perches, Irish, which was dug out of a lea last year for turnips. In addition to the solid manure, the land got a slight dressing of liquid manure from the cow tank, on 1st of April, one month previous to sowing the crops.

I have also made a trial on the rearing of mangel seed. The extent of land under this was one-ninth of an Irish acre, the produce from which, was 7 cwt. of well-saved seed; and there is a contract to purchase the same, at 32*s.* per cwt., which will amount to £11 4*s.*, or £100 16*s.* per acre. I hope to increase the quantity of land under this crop next year to 1 acre.

The different systems of cropping, were viewed with great interest by many visiters from the surrounding neighbourhood, and will, I hope, be very valuable to those engaged in green cropping, and an inducement to persons heretofore prejudiced against the system.

With reference to the mode of economizing manure, which is a most important matter (if not the *most important*), I have adopted the following course:—I had four square yards of land marked out in a convenient part of the farm, dug to the subsoil, and shovelled up at each side, leaving a square pit for the reception of the old straw beds, &c. &c. The privy receptacles, which are long, wooden troughs set on wheels, were discharged over this every morning, and covered up immediately with the spare clay from each side, to prevent the ammonia from escaping; this formed the *nucleus* of the manure heap, and this process was continued until all the loose clay which had

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Enniscorthy Union Workhouse Farm.

been thrown up on the sides was used. A further space of six feet was then marked off all round the heap thus formed, and the soil excavated and thrown outwards as before; the same process of depositing the manure, and covering it with the excavated earth, performed till the second portion of earth was used, when another space was excavated as before, and so on till all the manure required for that portion of the farm, had been secured in this way. When the manure has been afterwards applied to the land, and it is required to fill up the pit left by the removal of the earth, the hand barrows then go to work at every tenth drill, till a sufficient supply of earth has been obtained to fill up the site of the heap; this being done previous to digging the land, it cannot be known afterwards where the clay was taken from, and the bottom being consolidated, will have to be subsoiled previous to filling in the clay.

I have found manure thus collected, very successful in all cases, and the process can be carried on with the greatest regularity; but if the quantity of clay required for the manure heap, could be collected in large heaps in the spring season before sowing the crop, and thatched, and kept dry during winter in oblong heaps, it would be a much better absorbent, and half the bulk would suffice.

On the whole, I am happy to say, that this year's cropping was most successful, though the carrots, onions, and parsnips, suffered much from the ravages of the wire-worm—the land being all in old lea at the time the Guardians got it into their possession, it abounded in these destructive insects. It was broken up in certain proportions each year for flax: this was the fourth year that crop had been grown here on old lea, and with the greatest success. We have had 70 stone of scutched flax, and 20 bushels of well-saved seed per Irish acre.

Our profits this year would be much higher, but for the loss of 3 acres of vetches, which were sown for cows, and the land afterwards intended to be cropped with turnips. The Guardians having parted with the cows, in consequence of that terrible disease, pleura-neumonia setting in, directed that the vetches be kept for seed; but in consequence of the wet summer, they were a complete failure—this was only the first loss in parting with the cows.

The most cheering feature about the establishment, is to see respectable rate-payers of the Union, taking boys of about 15 years of age out of the Workhouse, since they became aware of the training they receive, and the active habits of industry they have consequently acquired.

No less than 50 boys have been taken out this year, which leaves at present not more than 12 boys of that class on the farm, whilst 100 is the daily average from 7 to 15 years, who, with the blessing of Providence, will soon be made good and useful members of society.

I expect to have the remainder of the old fences removed

this winter, the different roads through the farm completed, and the following rotation fully established the ensuing season :—

Years.	Principal Crop.	Stolen Crop.
1st, 1853,	Turnips.	
2nd, 1854,	Cabbages of the largest varieties.	
3rd, 1855,	Onions, Leeks, Parsnips, and Carrots,	Vetches (1 acre), after Onions.
4th, 1856,	Mangel.	
5th, 1857,	Barley, Wheat, or Oats, with Seeds.	
6th, 1858,	Italian Rye-grass.	
7th, 1859,	Flax, ...	Vetches.

The above rotation is designed for a workhouse farm of 35 statute acres, (each division to contain 5 acres), on which cows are to be kept. There will be 10 acres under turnips and mangel, which, with abundance of manure and thorough cultivation, will produce, on an average, 350 tons ; there can also be 50 tons of carrots reserved for the use of cows, which would make a total of 400 tons, sufficient to keep 40 cows for about seven months, allowing 1 cwt. of roots per day to each cow. For the remainder of the year there would be 6 acres of vetches, 5 of Italian rye-grass, one cutting of which could be made into hay, and 5 acres of cabbage. Taking the average yield of milk from each cow to be 8 quarts per day, that would be 29,200 gallons per annum, which at the contract price of 5*d.* per gallon, would amount to £608 6*s.* 8*d.*, besides the value of the flax and grain.

The course adopted in disposing of the farm produce is as follows :—The person requiring to purchase, makes application to the Workhouse Master, who fills up and hands him the "Form A," retaining the duplicate thereof. This form is then taken to the Clerk of the Union who receives payment for the articles required, and fills up "Form B," which the Agriculturist receives as authority for delivering the articles mentioned to the bearer of the order. The Agriculturist then fills up "Form C," and sends it to the Clerk of the Union, which the latter files as an acquittance to the Agriculturist for the produce set forth in it. The Agriculturist and the Clerk of the Union retain counterparts of the Forms B and C, and the Master that of the Form A, so that they have each a check on the other, and the greatest accuracy is thus secured in the accounts.

I have the honour to be, Sir, your most obedient servant,

ROBERT HAWKINS, Agriculturist.

Thomas Kirkpatrick, Esq., M.D.,
Inspector of National Agricultural Schools.

Forms of Orders for, and Certificates of, Sales of Farm Produce at Enniscorthy Workhouse.

(Form A.)

No.—— Enniscorthy Union.

4th day of January, 1853.

Please to give Bearer, Thomas Murphy, an Order on the Agriculturist for the following Farm Produce, on his paying you for same, at the prices stated, viz. :—

Name of Article.	Quantity.	Price.	Amount.
Mangels,	10 cwts.,	15*s.* per ton,	£ 0 *s.* 7 *d.* 6

G. Maguire, Master.

To the Clerk of the
Enniscorthy Union.

(Form B.)

No.——

The Bearer, Thomas Murphy, has paid me Seven Shillings and Sixpence for the articles herein mentioned, which you will please deliver to him.

Name of Article.	Quantity.	Price.	Amount.
Mangels,	10 cwts.,	15*s.* per ton,	£ 0 *s.* 7 *d.* 6

J. Kennedy, Clerk of Union.

Mr. Hawkins, Agriculturist.

(Form C.)

No.——

I have delivered the articles herein mentioned to Thomas Murphy of Enniscorthy.

Name of Article.	Quantity.	Price.	Amount.
Mangels,	10 cwts ,	15*s.* per ton,	£ 0 *s.* 7 *d.* 6

Dated this 4th day of January, 1853.

R. Hawkins, Agriculturist.

To the Clerk of the
Enniscorthy Union.

(Form A.)

No.—— Enniscorthy Union.

4th day of January, 1853.

Please to give Bearer, Thomas Murphy, an Order on the Agriculturist for the following Farm Produce, on his paying you for same, at the prices stated, viz. :—

Name of Article.	Quantity.	Price.	Amount.
Mangels,	10 cwts.,	15*s.* per ton,	£ 0 *s.* 7 *d.* 6

G. Maguire, Master.

To the Clerk of the
Enniscorthy Union.

(Form B.)

No.——

The Bearer, Thomas Murphy, has paid me the Sum of Seven Shillings and Sixpence for the articles herein mentioned, which you will please deliver to him.

Name of Article.	Quantity.	Price.	Amount.
Mangels,	10 cwts.,	15*s.* per ton,	£ 0 *s.* 7 *d.* 6

J. Kennedy, Clerk of Union.

Mr. Hawkins, Agriculturist.

The Agriculturist retains the Ticket.

(Form C.)

No.——

I have delivered the articles herein mentioned to Thomas Murphy of Enniscorthy.

Name of Article.	Quantity.	Price.	Amount.
Mangels,	10 cwts.,	15*s.* per ton,	£ 0 *s.* 7 *d.* 6

Dated this 4th day of January, 1853.

R. Hawkins, Agriculturist.

To the Clerk of the
Enniscorthy Union.

SUMMARY of the Year and BALANCE SHEET.

Dr.	£	s.	d.
To Amount Valuation at commencement of year,	339	3	11
,, paid in Rent, Taxes, &c.,	83	16	0
,, ,, Seeds, Lime, Manure, &c.,	28	15	11
,, ,, Cattle during the year,	4	1	3
,, ,, New Farming Implements and Repairs,	15	8	6
,, ,, Labour,	1	15	0
To Profit and Loss, gain on the year, being Balance in favour of Union, on account of Pauper Labour,	280	15	7
	£753	16	2

Cr.		£	s.	d.
By Amount received for Grain,		16	3	5
,, ,, Potatoes, Roots, &c.,		129	9	1
,, ,, Cattle sold,		124	6	0
,, ,, Dairy Produce,		45	4	2
By Amount of Inventory and Valuation taken at close of the year, viz.:—				
Mangel, 380 tons, 15*s.*,	£285 0 0			
Turnips, 90 tons, 10*s.*,	45 0 0			
Parsnips, 4 tons, 40*s.*,	8 0 0			
Flax Straw, 7½, 80*s.*,	30 0 0			
Flax Seeds, 30 bushels, 5*s.*,	7 10 0			
Mangel Seeds, 7 cwt., 32*s.*,	11 4 0			
Rye, 55 stone, 1*s.*,	2 15 0			
Leeks, 2 plots,	5 0 0			
Gennet and Donkey,	6 0 0			
Carts and Harness,	10 0 0			
Farm Implements,	28 4 6			
		438	13	6
		£753	16	2

TABLE showing the CROPPING of the Enniscorthy Workhouse National School Farm for 1852.

Crops Cultivated.	Extent Occupied. A.	R.	P.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c. £	s.	d.	Profit or Loss per Statute Acre on the Culture. £	s.	d.	Observations.
Flax,	3	0	0	April,	August,	3 bushels,	2½ tons straw; 12 bushels of seed,	8	4	0	6	12	0*p.*	
Cabbage,	2	1	0	Successionally,	Successionally,	4 lbs.,	14 tons,	9	13	6	5	6	6*p.*	
Onions and Leeks,	1	0	0	March,	September,	15 lbs.,	480 stones,	10	12	6	9	7	0*p.*	
Parsnips,	1	0	0	March,	November,	6 lbs.,	8 tons,	9	12	0	6	8	0*p.*	
Turnips,	4	0	0	June and July,	December,	4 lbs.,	25 tons,	9	10	3	3	4	9*p.*	
Mangel,	11	0	0	April and May,	November,	6 lbs.,	38 tons,	11	4	0	17	6	0*p.*	
Carrots,	1	0	0	April,	November,	6 lbs.,	18 tons,	9	4	8	8	15	4*p.*	
Vetches,	3	0	0	October,	August,	12 stones,	See Report,	8	1	0	8	1	0*l.*	
Potatoes,	0	0	13	February,	September,	150 stones,	720 stone,	10	15	0	7	5	0*p.*	
Pasture (old meadow),	3	0	0	—	—	—	1 ton,	3	8	0	2	8	0*l.*	
Rye,	0	2	0	October,	August,	12 stones,	10 barrels,	6	12	0	3	8	0*p.*	
Mangel seed,	0	0	27	February,	September,	15 tons roots,	360 stone,	18	15	0	65	5	0*p.*	
Under nursery, manure heaps, play-ground for school-children, roads, &c.,	3	0	0	—	—	—	—	—			—			
Total,	33	0	0											

(Signed,) ROBERT HAWKINS, Agriculturist.

I certify that the above returns are correct, according to the best of my knowledge and belief,

JOHN KENNEDY, Clerk of Union.

5th January, 1853.

75. GLASNEVIN AUXILIARY WORKHOUSE AGRICULTURAL SCHOOL.

8th January, 1853.

Glasnevin Auxiliary Workhouse Farm.

SIR,—Agreeably to your instructions, I beg to furnish you with a Report of what has been effected in the Agricultural department of the above establishment, since my appointment as Agriculturist on the 15th of November last.

The farm attached to this Workhouse has been in operation for the last four years. The first enclosure contained only about 2 statute acres, but in the year 1849, another field was added, by which it was enlarged to its present area of 8A. 1R. 28P. The soil is a moderately rich friable loam. The original farm, immediately after it had come into the hands of the Guardians, was thorough-drained under the superintendence of Mr. Parkes; the additional farm yet requires this improvement. The whole, including both the new and the old, was trenched a few years ago to the depth of 16 or 18 inches, but never since, thus leaving the active soil buried underneath the subsoil; this oversight we have determined to rectify, by trenching deeply again. It is only this winter that an old unsightly gripe running through the centre of the farm has been got rid of. Part of it had been sewered and levelled by my predecessor, and the remainder has since afforded us employment in weather not suitable to the working of the soil. A considerable length of the boundary fence has been also sewered and levelled, the wall of a church-yard parallel to it, and at some distance behind, answering in its stead. This wall has been connected at both ends to the mearing fence by two other short walls, in each of which is fixed an iron grate, to prevent vermin of all kinds entering the sewer. By the latter improvement a considerable portion of land has been gained.

The cultivation of the farm has been hitherto conducted more on the plan of a large *kitchen garden* than on that of an ordinary farm, where grass and grain would find a place; the object of the Guardians, next to that of *training the children*, being to grow a large amount of such vegetables as suit the consumption of the Workhouse, the surplus being readily disposed of in the market. Indeed a farm of such limited extent, conducted on any other principle, would be unsuccessful under the circumstances; and, therefore, it must still continue to retain the character of *garden culture* until it is thought proper to increase its area; and, no matter how anxious we feel to have a more extended field for our operations, so as to afford the children an example of a more comprehensive system of husbandry, we must content ourselves for the present with making the most of what we have.

With this object in view we have devised for our guidance the following rotation:—

TOWN-FARM ROTATION.

Plot No. 1.—Early Potatoes planted in latter part of autumn, or beginning of spring, and off in July and August following, when

early Cabbages are to be put in. These will be off in time to get the ground ridged and manured during the winter.

Plot No. 2.—White Dutch Turnips sown in spring; Mangel and Swede sown in summer. When White Dutch is off, any other crop which can be removed in autumn may be put in.

Plot No. 3.—Spring Cabbages, such as Flat Dutch, Red Dutch, and Nonpareil. As the latter is removed, Celery should be planted. When the other kinds and the Celery are removed, the ground is to be ridged and manured.

Plot No. 4.—White Turnips sown after the Cabbages are off in June and July. The Turnips will be off in November, at which time the ground is to be trenched and manured.

Plot No. 5.—Onions, Leeks, Carrots, Parsnips, and Red Beet, &c. As these are removed, early Cabbage is to be put in. The Cabbage will be off in May, June, and July, following.

In this rotation, in the shifting of the crops the second year, those that occupied the first division move round to the fifth, to replace those that shifted into the fourth; while those that occupied the second plot shift into the first: and so on, in regular succession.

The order of the crops in the foregoing rotation is not altogether in accordance with the principles upon which a rotation is founded; but, being limited to a particular system of cropping, as before described, such must unavoidably be the case. It will be seen by the diagram, that the farm required to be divided into five equal portions. This has been done, leaving $1\frac{1}{2}$ statute acres in each, and the remaining 3 roods and some perches for a nursery for young cabbage plants, &c., and in which to save as many kinds of our own seeds as can be grown together. A gravel walk running in the direction of N.E. to one of the manure heaps, divides the farm into two portions. On the west is situated one of the five divisions, and on the east, the other four and the nursery. All these are separated one from another by grass walks running across the ground, and at right angles to the main walk. The grass walks not only mark the divisions, but afford a facility for barrowing in the manure. Nothing now prevents us carrying out our rotation at once. As far as any interference of crops is concerned, we have none to contend with, for we did not on our entering find a single winter crop upon the whole farm, except some nonpareil cabbage, which happened to be on the very plot we would have had it on, had we planted it ourselves. But while we found a "clear stage" for us in this respect, we also found a large accumulation of labour to be performed, and it is not without a considerable effort it can be got through, so as to have the ground thoroughly prepared for the reception of the spring crops. Nothing in the shape of winter digging, except a small patch intended for potatoes, had been attempted; and trenching, which should have been done early in Autumn stood in our way too. I am happy to say, however, that we are getting over our work rapidly and satisfactorily, much more so than I anticipated, from the number and strength of the labourers. Although the oldest of the working class does

not exceed thirteen, and the average daily number thirty, we have already, not to speak of the levelling of the old gripes before alluded to, manured and trenched one of our plots two spadings deep, and ridged another to the depth of one spading. The remaining plots we intend to ridge in like manner, applying the manure as we go along to such as are intended for small seeds in spring.

Glasnevin Auxiliary Workhouse Farm.

We found a considerable quantity of manure upon the land, but in such a neglected condition as to insure the speedy escape of some of its most valuable ingredients. It was allowed to remain exposed in small heaps, and from two of these the liquid was fast finding its way to the nearest gripe. This, of course was at once remedied; and in order to prevent any further waste from exposure to the atmosphere, we are getting both liquid and solid buried in the soil as fast as we can. We will have but two manure heaps in future; and, were it not to facilitate the labour of wheeling, we should have but one. These will be situated in the most convenient positions on the farm, and the sites will be so constructed as to secure the perfect economization of the manure. A temporary tank, consisting of a large barrel, will be attached to each. To these heaps the weeds of the farm, the contents of the privies, the slops of the kitchen, and the suds of the laundries, must regularly find their way. Hitherto, attention has not been directed to any of these sources of manure, with the exception, perhaps, of the night-soil; and even bones to the amount of ½ cwt. weekly, have been sold off the premises. They shall not be sold in future, except in the shape of farm produce; and we will take occasion to make the boys practically acquainted with the method of dissolving them, when about to apply them to the land. In short, the farm shall be made the grand receptacle into which all manner of refuse from the whole establishment will flow; and by this means, it is hoped, the fertility of the soil will be kept up, without the purchase of any extraneous manures.

The "*Agricultural Class*" consists, on an average, of about 60 boys, and is separated into two divisions of 30 each. These divisions work alternate weeks, leaving, as before mentioned, the daily average of working boys only 30. The hours of labour are from 10, A.M., till 5, P.M., in summer, and till twilight in winter. The whole class receives instructions in the theory of agriculture from half-past 8 till 9 every morning. The course of instruction comprises all the agricultural subjects that are adapted to their capacities, and a knowledge of which, it is thought, will serve to make them efficient agricultural labourers hereafter. My mode of giving instructions is this:—I lecture for two successive mornings, and on the third I examine on the subject of the two previous mornings' lectures. At the end of each month, premiums, in the shape of agricultural pamphlets, are awarded to the best answerers in

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

Glasnevin Auxiliary Workhouse Farm.

the class. We have thus excited a wholesome emulation, the result of which cannot fail to be satisfactory.

In conclusion, I beg to say, that as regards the general economy of the farm, nothing on my part shall be wanting to render it worthy of imitation; while I will endeavour that industry, order, and good conduct shall characterize the boys while under my charge.

I have the honour to remain, Sir, your very humble servant,

MATTHEW CASEY, Agriculturist.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

BALANCE SHEET of Glasnevin Auxiliary Workhouse Farm Account, for the Year ended 31st December, 1852.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To Amount of Valuation at commencement of year,	10	0	0	By Amount received for Potatoes and Roots,	124	8	9
,, Rent and Taxes,	64	0	0	,, Inventory and Valuation at close of year,	14	11	0
,, Seeds, Lime, and Manure,	14	11	6				
,, Labour (Superintendence),	39	2	0				
To Profit and Loss, being Balance in favour of Union for Pauper Labour,	11	6	3				
	£138	19	9		£138	19	9

APPENDIX K.

II. Appendix to Dr. Kirkpatrick's Report.

76. DANGAN AUXILIARY WORKHOUSE AGRICULTURAL SCHOOL, Galway Union.

January 1, 1853.

Dangan Auxiliary Workhouse Farm.

SIR,—I beg to submit, for the information of the Commissioners of National Education, the following Report on the working of the agricultural department of this establishment for the past year (1852).

I was appointed Agriculturist on the 7th of May; and although I had not many difficulties to contend with, yet the aspect of my undertakings was not as favourable as might be anticipated under similar circumstances, partly owing to a want of a sufficient quantity of manure on the land (until it had been drawn a mile and a-half, from the parent house), and partly from the rude inexperience of some of the inmates when first admitted, until they became gradually sobered down by a systematic process of instruction. The farm contains fifteen Irish acres, eleven and a-half only of which are under cultivation, the remaining three and a-half being occupied by buildings, roads, and plantations. The varieties and respective breadths of the several crops cultivated, with the results of cultivation, will be found in the "Table of Cropping" appended to this Report.

In connexion with this establishment there is a school, where 400 boys, from five to fifteen years of age, attend daily, under the immediate control and efficient supervision of two experienced teachers, from whom they receive a sound mental and moral training.

It is truly painful to one interested in their condition, to witness the deplorable prostration of mind and body to which they are subject on entering the establishment. Taken from the lowest grades of society, and alike destitute of mental and physical power, many of them unable to articulate a word in English, and utterly ignorant of even the first rudiments of learning or civilization, they exhibit a picture of suffering humanity, more to be pitied than despised. To effect a thorough reformation of such a class, is no easy task; and it is not till after a time of unwearied patience and perseverance the desired object becomes accomplished. As soon as they reach the age of fifteen, they are transferred to the "Agricultural Class;" and, I must say, the latter were the only persons who derived much benefit from my lectures heretofore. There are about 100 boys employed daily on the farm, from six, A.M., until six, P.M., with intervals of half an hour for breakfast and one hour for dinner. About forty-five of them are employed in picking and breaking stones, weeding, cleaning, and repairing roads, &c. Some appear quite dissatisfied and turbulent when set to work at first, and have the greatest aversion to manual labour; but by judicious management these vicious antipathies are gradually conquered, and ultimately subside

before the orderly training and arrangements of the establishment. When this object is once gained, and when supplied with a proper quota of wholesome and nutritious food, they become tractable, contented, and happy; and I have observed, that those who originally were the most disorderly, in many instances became the most industrious, dutiful, and attentive. The energy which otherwise would make them nuisances to society, when rightly directed, serves to make them active and useful members of the community. I have selected a class of fifty, who attend my lectures on the elementary science and principles of agriculture, for one hour daily; and I find that the information thus acquired, gives a zest to the practical pursuits of the farm, so that by combining mental with manual exercise, they are more easily inducted into the system, and ensure a more certain prospect of success in after life.

It is to be regretted that the condition of the country is still such, as not to yield that demand for labour that otherwise might be expected, in consequence of which, there have not as many left the house as might be expected. But of those who have been hired out, the most gratifying accounts have been received as to their probity of character, and the satisfaction they have given in their avocations.

A general view of the present condition and prospect of the establishment, the order, cleanliness, and regularity of the inmates, the diligence and interest which have become manifest in acquiring information suited to the after pursuits, have inspired me with thankfulness for what I have been enabled to effect, and fresh vigour to prosecute the arduous undertaking intrusted to my charge. I am happy to say, the numerous visiters from all parts of the united kingdom, who have favoured the establishment with their presence, have recorded on our books very flattering notices of their approval.

This cheering aspect of affairs, in connexion with the healthy tone and comparative comfort and happiness of these children of want, is mainly attributable to the almost parental supervision exercised by the humane and indefatigable Inspector of the Union, John Hall, Esq., who, by his experience and counsel, affords fresh impulse to the increasing usefulness and prosperity of the Dangan Auxiliary.

I have the honour to be, Sir, your obedient servant,

Edward O'Brien, Agriculturist.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

Balance Sheet of Farm Accounts, commencing 16th of May and ending 31st December, 1852.

Dr.

	£ s. d.	£ s. d.
To value of Stock on hands, May 16, 1852, viz. :—		
,, Horse, mule, carts, and harness,	14 10 0	
,, Farming Implements,	10 10 0	
,, Mangels, 25 cwt.,	0 14 7	
,, Flax Straw, 12 cwt.,	3 0 0	
To value of growing crops, viz. :—		
,, Cabbages, Black Barley, Oats, and Wheat,	36 0 0	
		64 14 7
To expenditure incurred since 16th May, viz. :—		
,, Cash outlay for Implements purchased,	1 4 4	
,, ,, repairs of do.,	1 0 4	
,, ,, shoeing horse and mule,	0 9 0	
,, ,, Seeds purchased,	2 5 4	
,, ,, blasting powder and fuze,	0 5 0	
		5 4 0
,, Estimated Rent and Taxes of Land cultivated,	50 0 0	
		50 0 0
To Profit and Loss for Balance in favour of Union, on account of pauper labour,		164 0 5
		£283 19 0

Cr.

	£ s. d.	£ s. d.
By articles supplied to Workhouse, viz. :—		
,, 20 tons of Cabbages,	34 2 3	
,, 26 tons 12 cwt. Turnips,	18 6 4	
,, 12¼ cwt. Onions,	4 16 1	
,, 20 stones Potatoes,	0 7 0	
,, 9½ tons of Straw,	7 10 0	
,, 2½ cwt. of Parsnips,	0 5 10	
,, 1 cwt. of Carrots,	0 2 4	
,, 25 cwt. of Mangels,	0 14 7	
		66 4 5
By articles sold, viz. :—		
,, Corn,	15 14 10	
,, Turnips, 9 tons 9 cwt.,	5 3 11	
,, Parsnips, 1 ton 10 cwt.,	3 0 6	
,, Carrots, 2 cwt.,	0 4 8	
,, Mangels, 1 ton 15 cwt.,	1 1 0	
,, Potatoes, 254 stones,	4 2 7	
,, Garden produce (fruit),	2 2 1	
		31 9 7
By amount of Inventory and Valuation on 31st December, 1852, viz. :		
,, Onions, 3 tons 5 cwt.,	24 0 0	
,, Turnips, 80 tons,	48 0 0	
,, Mangels, 40 tons,	24 0 0	
,, Parsnips, 12 tons,	24 0 0	
,, Carrots, 6 tons,	12 0 0	
,, Flax, 2½ tons,	10 0 0	
,, Cabbages, growing, 3 acres,	20 0 0	
		162 0 0
By value of horse, mule, carts, and harness,	14 10 0	
,, Farming Implements,	9 15 0	
		24 5 0
		£283 19 0

TABLE showing the CROPPING of the Dangan Auxiliary Workhouse Farm, for 1852.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.
	A. R. P.						£ s. d.	
Wheat,	1 2 22	Not known,	21st August,	Not known,	10½ cwts.,	—	7 1 5	Grew rank and lodged; sown in drills.
Oats,	1 2 22	—	—	—	13 cwts.,	—	5 4 8	Grew rank and lodged; sown in drills.
Barley, Black,	0 3 0	—	12th July,	—	10¾ cwts.,	—	4 6 0	Grew rank and lodged; sown in drills.
Cabbages,	1 0 0	—	31st December,	—	20 tons,	—	34 2 3	
Flax,	1 2 31	April,	18th August,	—	1¼ tons,	—	5 18 1½	This crop was a failure, the seed being bad.
Onions,	0 1 32	March,	10th September,	—	132 cwts.,	—	63 18 5	
Potatoes,	0 3 0	March,	16th October,	—	42 cwts.,	—	5 12 0	A great part of this crop was blighted.
Parsnips,	1 2 9	March,	20th November,	4 lbs.,	173 cwts.,	—	17 1 0	
Carrots,	1 0 25	April,	20th December,	4 lbs.,	106 cwts.,	—	10 13 1	Cabbages were growing between the drills, which injured this crop.
Mangels,	1 3 16	6th May,	December,	4 lbs.,	22 tons,	—	25 4 0	
Turnips,	5 0 22	5th June,	December,	4 lbs.,	20 tons 13cwt	—	11 19 3	Sown late, on account of having no manure on the land, until drawn from principal house.
Total,	17 2 19							

(Signed), EDWARD O'BRIEN, Agriculturist.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

JOHN O'GRADY, Manager.

10th January, 1853.

Appendix K.

II. Appendix to Dr. Kirkpatrick's Report.

77. Lismore Workhouse National Agricultural School and Model Farm.

March, 1853.

Lismore Union Workhouse Farm.

Sir,—In compliance with your instructions, I beg, respectfully, to submit the following report on the above Workhouse school and farm. I cannot furnish the statistical details required respecting the expenses and results of the cultivation, as no regular accounts of expenditure or receipts were kept by my predecessor. The farm contains 18a. 3r., all of which is under tillage, except what is occupied by roads, cesspools, &c.

Situation and Soil.—A portion of this farm (five acres) is in a low situation, subject to be inundated by rains and underwater. The other portion (13a. 3r.) is more favourably situated, being on rising ground, half of which has an eastern, and the other a western aspect. The former is divided into six unequal plots, by a road running east and west, and two others at right angles to this. The soil is very good; in its natural state it might be termed a heavy clay; it may now be termed a claycy loam. It is interspersed with a quantity of round sandstones, and rests on a subsoil of reddish clay, containing some oxide of iron, and intermixed with sand and small boulders. Limestone rock being the prevailing one in this locality, the water soon finds its way out of the soil, which, therefore, requires no draining.

Cropping.—The greater part of the farm was under turnips this year, with some carrots, parsnips, leeks, onions, cabbages, and flax; the latter vegetables occupied but a small portion of it.

All the crops have been used in the house, except a quantity of turnips, which had to be sold at a cheap rate, in consequence of their becoming damaged. The crops in general were very good.

Permanent Improvements.—No works of this kind have been completed, but a road behind the workhouse. When time permits, there are some unnecessary walks which may be dispensed with, and the fences of the new division of farm repaired, as they require it very much.

Agricultural Instruction.—A class of thirty boys is instructed by me for an hour every evening, and sometimes in the morning, when business does not call on me otherwise. There are a few boys in this class who are able to read the "*Agricultural Class Book*;" but for the most part, they have been all taken out of the "*Second Class.*" Their progress in agricultural knowledge must be slow, in consequence of the backwardness of their literary education. However, I am glad to have to state, that their general improvement far exceeds what might be anticipated from such a class. Their

general conduct, and attention to business, has attracted much notice.

General Remarks.—No regular rotation or rotations have been carried out here, nor is it intended to establish any for some time, as I got directions from the Guardians to grow the crops most profitable and appropriate for the use of the house. No cows are kept here, which is a great drawback on the efficiency of the instruction imparted, as it will prevent the boys becoming familiar with the proper treatment and management of them.

After clearing the land of the crops, I found much of it in a neglected state, being overrun with weeds, such as couch-grass and crow-foot, which were allowed to accumulate in the land for the last few years, as the boys, in digging the ground, wherever they met weeds, covered them a few inches deep, expecting they should rot. When a fair day would permit, I turned my attention to the ridging up and subsoiling the ground, particularly that intended for those crops which require a good depth of soil for their development.

It may not be out of place here to remark, that the principal defects in the systems of agriculture pursued in this locality by the middle and lower classes of farmers, are—neglecting to plough the land intended for green and other crops, in autumn or winter,—not paying due attention to the cleaning of the land, previous to putting in the crops; nor, even afterwards, to keep the growing crops properly free from weeds. This, I find, on inquiry, occurs for want of their knowing how they impoverish the soil. Also, mixing lime and dung; and applying lime and dung in the same season, the latter a week or two after the former. It is hard to prevail on them to quit this erroneous practice, nor yet make them believe how much quick-lime injures manure, and lessens its quality. But, on the contrary, very many of them deserve much credit, for they seem to be guided by science and system in the judicious management of their farms.

A short time ago, a motion was brought forward at the Board, to have the farm given up, and my services dispensed with; but I am happy to say (not from any selfish consideration, but from a desire to see a useful system of industrial training continued in operation here), that it was rejected.

Mr. Curry, the chairman on this occasion, whose untiring exertions and zeal for the diffusion of agricultural knowledge, is so well known, said—"*It is not solely for profit we should keep the farm, when the education of so many destitute youths is at stake; but, as men of understanding, we must look to the proper training of the youthful and ignorant inmates of the workhouse, who, if they had no industrial employment, would grow up a mass of idleness, and inevitably become, hereafter, a burden on the country, and a pest to society, as they would be incompetent to support themselves by honest industry in the performance of the agricultural labours of the country.*"

Trusting that these judicious and benevolent views may not only continue to sway the conduct of this Board, but that they may be adopted in every other case in which the benefits of efficient industrial training for pauper children have not yet been provided,

I have the honour to be, Sir, your obedient humble servant,

WILLIAM FLOOD, Agriculturist.

Thomas Kirkpatrick, Esq., M.D.,
Agricultural Inspector.

III.—Analyses of the Soils of some of the Model Farms in connexion with the Board of National Education in Ireland, showing their Mechanical and Chemical Constitution, as ascertained by John F. Hodges, Esq., M.D., Professor of Agriculture in Queen's College, Belfast, &c.

Name of Model Farm.	Soil Analysed.	Mechanical Composition.			Chemical Composition.					
		Clay and fine Sand.	Coarse Sand.	Total.	Potash.	Soda.	Carbonate of Lime.	Carbonate of Magnesia.	Alumina.	Peroxide of Iron.
Glasnevin,	Surface soil,	33·19	66·81	100·0	0·380	–	2·711	0·345	1·201	3·642
	Subsoil,	30·82	69·18	100·0	0 060	0·19	31·56	0·25	1·67	2·71
Markethill,	Surface soil,	30·0	70·0	100·0	–	–	0·26	0·40	4·93	4 62
	Subsoil,	–	–	–	–	–	0·01	trace,	–	10·86
Larne,	Surface soil,	41·0	59·0	100·0	–	–	1·82	0·48	4·46	10·36
	Subsoil,	–	–	–	–	–	1·30	0·09	5·60	9·45
Kyle Park,	Surface soil,	–	–	–	Soluble salts of potash and soda,	0·23	0·27	0·38	0·75	1·63
	Subsoil,	36·21	63·79	100·0						
Farrahy,	Surface soil,	22·75	77·25	100·0	0.07	–	0·43	0·09	5·65	2·15
	Subsoil,	25·31	74·69	100·0	0·04	–	–	–	–	3·73
Dunmanway,	Surface soil,	10·97	89·03	100·00	Soluble salts of potash and soda,	0·64	0·12	0·03	1·34	6·18
	Subsoil,	15·00	85·00	100·00	0·18	–	0·67	0·19	2·17	5·60

Chemical Composition—*continued*.										
Chloride of Sodium.	Sulphate of Lime.	Phosphoric Acid.	Organic Matter.		Insoluble Siliceous Matters.	Total.	Water in Sample.	Description.	Soil Analysed.	Name of Model Farm.
			Soluble.	Insoluble.						
0·077	0·338	0·139	0·257	11·845	78·101	99·036	3·757	Loam,	Surface soil,	Glasnevin.
0·08	–	0·03	both,	3·06	60·13	99·74	2·000	Calcareous loam,	Subsoil,	
–	–	–	both,	12·41	78·10	100·72	28·40	Sandy loam,	Surface soil,	Markethill.
–	–	–	both,	1·73	86·46	99·06	19·10	—	Subsoil,	
–	–	0·10	both,	12·79	68·35	98·36	20·00	Loam,	Surface soil,	Larne.
–	–	trace,	both,	9·39	73·31	99 14	22·95	—	Subsoil,	
–	0·15	0·06	both,	1·89	94·28	99·64	6·10	Loam,	Subsoil,	Kyle Park.
0·56	0·12	0·07	both,	3·24	88·25	100·63	1·76	Sandy loam,	Surface soil,	Farrahy.
0·15	0·14	trace,	both,	3·01	91·41	100·56	1·54	Sandy loam,	Subsoil,	
–	Sulphuric acid. 0·02	0·03	both,	11·24	80·05	99·65	3·00	Sandy loam,	Surface soil,	Dunmanway.
0·63	0·03	0·01	both,	7·40	83·53	100·42	3·20	Sandy loam,	Subsoil,	

Appendix K. IV. Circular.

IV.—Circular.—Annual Reports and Returns of "Statistics and Cropping" of the National Agricultural Schools.

Education Office, Marlborough-street, Dublin,
185 .

Sir,—We are directed to request that your Report for the year on the Agricultural department of the Agricultural National School, together with the Returns of "Statistics and Cropping," of which blank forms are herewith sent, may be forwarded to this office before the end of the first week in January next.

It is requested that your Report may be drawn up with great care, in a simple and perspicuous style, avoiding all topics not strictly pertaining to your department, and briefly explaining, under the several heads herein set forth, the leading features of your system of management, and any peculiarities that may distinguish your practice from that usually followed.

It is also requested that the particulars required to be furnished in the returns, may be ascertained with the *greatest possible accuracy*, the object in view in requiring such details being, not only to ascertain the progress made and results obtained in each *individual* case, but to exhibit a *tabular statement* of the results realised in *different localities*, with *different soils*, and under *different circumstances*. Such a statement, if carefully compiled from *correct data*, may be found useful in many respects, and will form a valuable addition to our agricultural and educational statistics; but, on the contrary, if erroneous or exaggerated, it will be positively mischievous, and only tend to bring discredit on the parties furnishing such, and on the system they are engaged in carrying out.

To obviate the necessity of forwarding the Farm Account Book, for the purpose of checking the accuracy of the statements in your report, you are requested to furnish an abstract of your accounts, on the form supplied for that purpose, and to have the same examined and certified by the Manager previous to its transmission.

It is considered desirable, for the sake of facility of reference, that some uniform arrangement should be adopted and adhered to in the publication of these reports, and you will, therefore, submit your observations, on the several matters pertaining to the agricultural department, in the following order:—

I.—Agricultural Instruction.

1. Agricultural Boarders,
2. Agricultural Class,
3. Industrial Class,

State the increase or decrease in each class as compared with the previous year; and the attention to study, and proficiency acquired by the members of each.

II.—Model Farm.

State the degree of success which has attended your labours on it during the last year, and any peculiarities in your mode of cultivation, or in the results arising therefrom, which you may consider it useful and instructive to set forth.

III.—Live Stock and Dairy Management.

IV.—Manures.

How collected, preserved, and applied.

If portable or special manures were required, state the kinds, the crops to which they were applied, the quantity per acre, and the comparative results.

V.—Permanent improvement effected during the year.

VI.—Progress of agricultural improvement in your locality, and to what extent it has been influenced and promoted by the beneficial example of improved management afforded on your model farm, &c.

VII.—Concluding observations and suggestions.

We are, Sir, your obedient servants,

Maurice Cross,
James Kelly, } Secretaries.

To

_____

_____

(RETURN No. 1.)

Statistics of the _____ Agricultural National School and Model Farm, County _____

31st December, 185 .

Extent.	Rent or Value per Statute Acre.	Cost of Cultivation.					Return from Cultivation.		
		Amount paid for Labour.	Estimated Value of the Gratuitous Labour of the Pupils.	Cost of Seeds, Manures, &c.	Rent and Taxes.	Total.	Estimated Value of the Produce raised.	Profit or Loss on the Farming transactions of the Year.	Comparative acreable (Statute) Profit or Loss.

(*Continued.*)

Live Stock.								Rotation or Rotations followed.	Pupils receiving Agricultural Instruction.				"Industrial Class."		
Draft Animals.	Black Cattle.				Sheep.	Pigs.	Poultry.		Agricultural Boarders.			Day Pupils.	Number paid by the Commissrs.	Number paid by the Patron or Teacher.	
	Bulls or Bullocks.	Cows.	Heifers	Calves.					Free.	Pay half.	Pay full amount.			Patron.	Teacher.

(Return No. 2.)

Table showing the Cropping of the_____National School Farm, for 185 .

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Estimated Expense of Cultivation per Statute Acre, including Seed, Rent, &c.	Profit or Loss per Statute Acre on the Culture.	Observations.

(Signed,)_____ _____Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

_____ _____Manager.

_____ _____Date.

Appendix K.

V. Prospectus of the Model Agricultural National Schools.

V.—Prospectus of the Model Agricultural National Schools.

The object of these Institutions is, besides affording Agricultural Instruction to the more advanced pupils attending the Literary Schools, and setting an example of skilful cultivation to the farmers in their neighbourhood, to educate and train a class of young men destined for agricultural professions, as Agricultural Teachers, Agriculturists, and Land Stewards. With this view accommodation has been provided at each for a certain number of resident Agricultural Pupils, or "Boarders," of whom one is always to be a *free* pupil selected from the most deserving pupils of the School, the others being required to pay *half* the estimated cost of their maintenance.

The persons selected to fill these Agricultural Scholarships must be not less than FIFTEEN years of age, of good moral character, sound physical constitution, and fair literary acquirements. Pupils of National Schools will obtain a preference.

They will be dieted, lodged, and will have their washing done in the establishment; and will receive literary instruction from the Schoolmaster, and a course of lectures on Agricultural Science from the Agriculturist, besides practical instruction on the Model Farm, in all the operations of which they will be required to assist.

The course of instruction will comprise:—

In the Literary Department—Reading; Writing; Grammar, including English Composition; Geography; History; and Arithmetic, Book-keeping, and Geometry, especially in their relation to Agriculture.

In the Agricultural Department—Drainage; tillage by manual and horse labour, with the description and use of the different implements necessary; rotation of crops; preparation of the soil for, time and mode of sowing, after-culture, harvesting and economizing the different crops cultivated; the best modes of collecting and preserving manures, with the nature and utility of stimulants and special manures, the crops to which they should be applied, at what time, and in what quantity; the breeding, rearing, house-feeding, and general management of the different kinds of live stock.

While inmates of the Establishment they will be required to conform to its rules, and they will be constantly under the charge of a vigilant and intelligent superintendent, who will strictly enforce order and discipline, and enjoin the observance of all moral and religious duties.

When the course of study in these Establishments is completed, those who have distinguished themselves by their good conduct and proficiency will have an opportunity of being sent to the principal Establishment at Glasnevin, there to complete their course of training free of any further expense.

In order to place the opportunity of receiving such useful and valuable instruction within the reach of the humble class for whom it is chiefly designed, the Commissioners have determined on fixing the amount to be allowed for the maintenance of the Agricultural Boarders at the minimum sum that would be adequate to meet the expense of it according to a plain, but substantial scale—(see the annexed "Dietary Table")—which is estimated at £12 per annum.

The amount to be charged to each Pupil is £6 per annum, payable quarterly in advance.

RESIDENT AGRICULTURAL PUPILS' TIME-TABLE.

H. M.	H. M.	
At 5	0 A.M.	Rise.
From 5	0 to 5 30	Dress and make up Beds.
„ 5	30 to 5 45	Prayers.
„ 5	45 to 6 30	Feed and Clean Stock, Clean Yard, &c.
„ 6	30 to 7 0	Wash and prepare for Study.
„ 7	0 to 8 45	Study Agricultural Subjects, and attend the Lecture or Examination of the Agriculturist.
„ 8	45 to 9 0	Prepare for Breakfast.
„ 9	0 to 9 30	Breakfast.
„ 9	30 to 2 0	P.M. Feed Stock and Work on the Farm.
„ 2	0 to 3 0	Dinner.
„ 3	0 to 6 0	Feed Stock and Work on the Farm.
„ 6	0 to 6 30	Prepare for Study.
„ 6	30 to 8 0	Study Literary subjects under the superintendence of the Literary Teacher.
„ 8	0 to 8 30	Supper.
„ 8	30 to 9 15	Feed Stock and arrange everything for the night.
„ 9	15 to 9 30	Prayers.
At 9	30 . .	Prepare for Bed.
At 9	45 . .	Extinguish lights in Dormitory.

The above is designed for the *Summer* half year; during the Winter months the hours for rising, meals, labour, and instruction, must be regulated according to the season.

DIETARY for RESIDENT AGRICULTURAL PUPILS.

Days.	Breakfast.	Dinner.	Supper.
SUN.	Bread ¾lb.; Butter, 1 oz.; Tea, 1 pint.	Bread, ¾lb.; Beef, boiled or stewed, ¾lb., and Vegetables.*	Oatmeal, ½lb. in Stirabout, and Skim Mlk. 1 pt.
MON.	Do., and Sweetmilk, 1 pint.	Do., and Bacon, ¼lb. boiled with Vegetables.	Do.
TUES.	Do. do.	Do., Butter, 1 oz.; Eggs, 2.	Do.
WED.	Do. do.	Do., Soup, 1 pint, and Vegetables.	Do.
THUR.	Do. do.	Do., Bacon, ¼lb, and 2 eggs fried.	Do.
FRI.	Do. Butter, 1 oz., and Coffee, 1 pint.	Do., Fish, 1lb., or Milk, 1 pint, and Butter, 1 oz.	Do.
SAT.	Do. Sweetmilk, 1 pint.	Do., Soup, 1 pint, and Vegetables.	Do.

* Potatoes, when available, can be substituted occasionally for the Bread at Dinner.

MAURICE CROSS,
JAMES KELLY, } Secretaries.

Education Office, Marlborough-street,
April, 1852.

APPENDIX K.

VI. Directions for obtaining Aid to Ordinary Agricultural Schools.

VI.—MEANS to be adopted for obtaining AID towards the establishment of an AGRICULTURAL DEPARTMENT in connexion with a NATIONAL SCHOOL where local circumstances may be favourable for the combining of Agricultural with Literary instruction.

As much uncertainty is found to exist as to the proper course to be taken in order to obtain a grant towards the establishment of an *agricultural department* in connexion with a National School, and as many applications have had to be rejected in consequence of the necessary conditions not being complied with, it is deemed advisable to publish a few plain directions for the future guidance of parties desirous of having *agricultural* instruction introduced into National Schools under their management:—

Wherever a farm of land of not less than *three statute acres* in extent, and at a distance not exceeding *half a mile*, is connected with a National School, the agricultural department will receive aid on the following conditions:

1st.—That an "*Agricultural Class*" of at least *ten* of the more advanced boys shall receive *theoretical* instruction in the school, and *practical* instruction on the farm, during a specified time each day.

2nd.—That the farm connected with the school shall be efficiently cultivated, according to some approved and *regular system* of *rotation*, so as to serve as a *Model* to the pupils and the surrounding neighbourhood.

3rd.—That the "*house-feeding of cattle*," and the *careful collection* and *skilful application* of *manure*, form characteristic features in the system of farm management.

When it has been determined to make application for aid, the manager should write to the "Secretaries, Education Office," notifying his desire to have agricultural instruction introduced into the school. He will then be furnished with the proper form of application, which he is to fill up and transmit to the Office. Directions will then be given to the Agricultural Inspector to visit at the earliest opportunity; *but, in the mean time, active steps should be taken in organizing the agricultural department, for unless it shall be in an efficient state of operation when the Agricultural Inspector visits, his report must be unfavourable, and the application must consequently be rejected.* If, on the other hand, an agricultural class has been formed, and is found to be progressing favourably in agricultural knowledge, and that the farm shall appear skilfully and carefully cultivated, the report must be favourable, and the grant of agricultural salary will date from the first of the month in which the application was received (if up before the 15th), *no matter what interval may elapse between the date of its being forwarded and the period of the Agricultural Inspector's visit.*

MAURICE CROSS,
JAMES KELLY, } Secretaries.

APPENDIX L.

Page

I. Four Tables, showing the Number of Vested, to be Vested, and Non-vested National Schools on the 31st December, 1852, ... 731

Appendix L.

I.—Tables (No. 1, 2, 3, and 4) showing the Number of Vested, to be Vested, and Non-Vested National School Houses and School Rooms, on the 31st December, 1852.

VESTED SCHOOLS.

No. 1.—Summary in Provinces of Number of Vested National Schools on the 31st December, 1852, showing the Number of School Houses Vested, the Nature of their Security, and the Number of School Rooms with Roll Nos. in these Houses, and the Nature of Attendance in these Rooms.

Provinces.	Number of School Houses Vested.						Number of School Rooms with Roll Nos. in Vested Houses.						Nature of Attendance in Vested School Rooms.				
	Leased.				Held by Bonds.	Total No. of Houses held by Leases or Bonds.	Leased.				Held by Bonds.	Total No. of School Rooms with Roll Nos. in houses held by Leases or Bonds.	Mixed, attended by Males, Females, and Infants.	Separate.			
	To Commissioners.	Assigned to Commissioners.	To Trustees.	Total.			To Commissioners.	Assigned to Commissioners.	To Trustees.	Total.				Males.	Females.	Infants.	Total.
Ulster . .	73	46	226	345	27	372	98	58	299	455	31	486	245	121	115	5	486
Munster .	83	27	183	293	19	312	129	42	283	454	25	479	121	180	176	2	479
Leinster .	27	3	156	186	18	204	48	5	268	321	31	352	48	148	150	6	352
Connaught .	62	23	101	186	3	189	84	34	147	265	4	269	100	84	83	2	269
Total, .	245	99	666	1,010	67	1,077	359	139	997	1,495	91	1,586	514	533	524	15	1,586

TO BE VESTED SCHOOLS.

No. 2.—Summary in Provinces of the Number of School Houses on the 31st December, 1852, to be Leased to Commissioners in their Corporate Capacity, showing the Number of School Rooms with Roll Nos. in these Houses, and the Nature of Attendance in these Rooms.

Provinces.	No. of School Houses to be Vested.	No. of Rooms with Roll Nos. in Houses to be Vested.	Nature of Attendance in School Rooms to be Vested.				
			Mixed, attended by Males, Females, and Infants.	Separate.			Total.
				Males.	Females.	Infants.	
Ulster . .	4	6	2	2	2	–	6
Munster . .	16	20	10	5	5	–	20
Leinster . .	3	3	3	–	–	–	3
Connaught .	7	8	6	1	1	–	8
Total, . .	30	37	21	8	8	–	37

NON-VESTED SCHOOLS.

No. 3.—Summary in Provinces of the Number of Non-Vested National Schools, on the 31st December, 1852.

Provinces.	Number of School Rooms.				
	Mixed, attended by Males, Females, and Infants.	Separate.			Total.
		Males.	Females.	Infants.	
Ulster . .	1,046	155	205	7	1,413
Munster . .	323	173	200	7	703
Leinster .	304	252	259	14	829
Connaught .	272	52	71	–	395
Total, .	1,945	632	735	28	3,340

VESTED, TO BE VESTED, AND NON-VESTED SCHOOLS.

No. 4.—Summary in Provinces of the Total Number of School Rooms with Roll Nos. in Vested, To be Vested, and Non-Vested Houses, on the 31st December, 1852.

Provinces.	Total Number of School Rooms with Roll Nos. in Vested and Non-Vested Houses, on the 31st December, 1852.				
	Mixed, attended by Males, Females, and Infants.	Separate.			Total.
		Males.	Females.	Infants.	
Ulster . .	1,293	278	322	12	1,905
Munster . .	454	358	381	9	1,202
Leinster . .	355	400	409	20	1,184
Connaught .	378	137	155	2	672
Total, .	2,480	1,173	1,267	43	4,963

DUBLIN: PRINTED BY ALEX. THOM & SONS, 87, ABBEY-STREET,
FOR HER MAJESTY'S STATIONERY OFFICE.